

```

1 GCGGCGGCTC AGGGAGCTGG AGCCTCAACA GCCTCCAGCG AGCCCGGGAC
51 CCGCCGACAG CCCGAGAAAC CAGCCGAAGG ACGCCGGGCG GGGTCGCCGC
101 CGCCGCCACG GGGTGCTCCC TCCCTCCCGC CCAAGTCCGG CCACCTGGTC
151 TTCCCTCGG CCCCGGCCGT CTCAGACTCA TCAAATGAA ACCAGGAGGC
201 TTTTGGCTGC ATCTCACACT GCTCGGAGCC TCCCTGCCGG CTGCGCTGGG
251 ATGGATGGAC CCAGGAACCA GCAGAGGCCG GGATGTGGGT GTGGGGGAGT
301 CACAGGCAGA GGAGCCCAAG AGCTTTGAAG TCACAAGAAG AGAAGGGCTT
351 TCCAGCCACA ACGAGCTGCT GGCTCCTGCG GGAAGAAGT TCTGCAGCCG
401 AGGGAGCCGG TGCGTGCTCA GCAGGAAGAC AGGGGAGCCC GAATGCCAGT
451 GCCTGGAGGC ATGCAGGCCG AGCTACGTGC CTGTGTGCGG CTCTGATGGG
501 AGGTTTTATG AAAAACCCTG TAAGCTCCAC CGTGCTGCTT GCCTCCTGGG
551 AAAGAGGATC ACCGTCATCC ACAGCAAGGA CTGTTTCCTC AAAGGTGACA
601 CGTGCACCAT GGCCGGCTAC GCCCGCTTGA AGAATGTCCT TCTGGCACTC
651 CAGACCCGTC TGCAGCCACT CCAAGAAGGA GACAGCAGAC AAGACCCTGC
701 CTCCCAGAAG CGCCTCCTGG TGAATCTCT GTTCAGGGAC TTAGATGCAG
751 ATGGCAATGG CCACCTCAGC AGCTCCGAAC TGGCTCAGCA TGTGCTGAAG
801 AAGCAGGACC TGGATGAAGA CTTACTTGGT TGTCACCAG GTGACCTCCT
851 CCGATTTGAC GATTACAACA GTGACAGCTC CCTGACCCTC CGCGAGTTCT
901 ACATGGCCTT CCGGCAGAAA TGCTGAAAAC ATTCATTTGT CAAAACCTTG
951 AAAGCCACAG GACTGAGCCA ACAAGGAGAG AAGCAATCAG GACTTTGTCA
1001 TCAGAGGAGG CGGACTGCCC CCACGTCCCTA TCAAATTTAG TCCGGAATGT
1051 ATTTTGCCAT TATTGTAAC TATGCCCTCA GCTGCCACGC CGTTTCAGGA
1101 ACGGAGCGCT AATACATTCT GTGGCACAGT CTCTTTATGG GGAGGAAAGG
1151 ATCCAGTGTC CCCTTGACAG AGAGAGAATA ATAGCATAAT GCAACAGAAC
1201 ATTTTGTAAA TGCTAATACA CGCTCTCCGC AACTTAATTT TATTTTTC
1251 TTATTGGCTT TTTTATATGA CATTTCACAG TCCTGTAGCC TCAATAGCTA
1301 GATCTGCATC GTAAAAATGA CAACACGGTG ATTTAAGGAG GAGAGTCCAT
1351 CAGAGCGAAA TGGGTGGTGT GCTTTTAAAG TATCAGTTTA GCACCTCTTA
1401 CCTGGGATCA ATGTTTATTC TCAATACATC ATTAAGCATC CCTGTAAAT
1451 CAAAAAAAAA AAAAAAAAAA AAAAAAAAAA AAAAAAAAAA AAAAA
1501 AAAAAAAAAA AAAAAAAAAA AAAAAAAAAA AAAAAAAAAA AAAAA (SEQ ID NO: 1)

```

**FEATURES:**  
5'UTR: 1-185  
Start Codon: 186  
Stop Codon: 924  
3'UTR: 927

**Homologous proteins:**  
**Top BLAST Hits:**

	Score	E
CRA 335001101606041 /dataset=GENESEQ /org=Homo sapiens /taxon=9...	507	e-144
CRA 335001101606043 /dataset=GENESEQ /org=Homo sapiens /taxon=9...	393	e-109
CRA 335001101606039 /dataset=GENESEQ /org=Homo sapiens /taxon=9...	204	2e-52
CRA 335001101547741 /dataset=GENESEQ /org=Homo sapiens /taxon=9...	199	5e-51
CRA 335001101547741 /dataset=GENESEQ /org=Homo sapiens /taxon=9...	199	5e-51

**BLAST hits to dbEST:**

	Score	E
CRA 1000479221223 /altid=gi 3644849 /dataset=dbest /taxon=9606 ...	769	0.0
CRA 157000140836445 /altid=gi 13450375 /dataset=dbest /taxon=96...	737	0.0
CRA 61000077326330 /altid=gi 14464967 /dataset=dbest /taxon=960...	654	0.0
CRA 1000490577863 /altid=gi 5394666 /dataset=dbest /taxon=9606 ...	611	e-172
CRA 61000077321890 /altid=gi 14464587 /dataset=dbest /taxon=960...	605	e-170
CRA 61000077326375 /altid=gi 14464972 /dataset=dbest /taxon=960...	599	e-168
CRA 118000028774058 /altid=gi 10908004 /dataset=dbest /taxon=96...	100	3e-18
CRA 335001100819886 /altid=gi 11685581 /dataset=dbest /taxon=96...	100	3e-18

**EXPRESSION INFORMATION:**

Tissue source of BLAST dbEST hits:  
gi|3644849 Soares\_testis\_NHT

Tissue source of cDNA clone:  
whole brain

1 MKPGGFWLHL TLLGASLPAA LGWMDPGTSR GPDVGVGESQ AEEPVSFEVT  
 51 RREGSSSHNE LLASCGKKFC SRGSRVLSR KTGEPECQCL EACRPSYVPV  
 101 CGSDGRFYEN HCKLHRAACL LGKRITVIHS KDCFLKGDTC TMAGYARLKN  
 151 VLLALQTRLQ PLQEGDSRQD PASQKRLIVE SLFRDLADAG NGHLSSELA  
 201 QHVLKKQDLD EDLLGCSPGD LLRFDDYNSD SSLTLREFYM AFRQKC (SEQ ID NO:2)

**FEATURES:**

**Functional domains and key regions:**

Prosite results:

PDOC00004 PS00004 CAMP\_PHOSPHO\_SITE

cAMP- and cGMP-dependent protein kinase phosphorylation site  
 123-126 KRIT

PDOC00005 PS00005 PKC\_PHOSPHO\_SITE

Protein kinase C phosphorylation site

Number of matches: 5

1	28-30	TSR
2	50-52	TRR
3	79-81	SRK
4	173-175	SQK
5	234-236	TLR

PDOC00006 PS00006 CK2\_PHOSPHO\_SITE

Casein kinase II phosphorylation site

Number of matches: 7

1	39-42	SQAE
2	50-53	TRRE
3	57-60	SHNE
4	167-170	SRQD
5	195-198	SSSE
6	217-220	SPGD
7	234-237	TLRE

PDOC00008 PS00008 MYRISTYL

N-myristoylation site

Number of matches: 2

1	35-40	GVGESQ
2	215-220	GCSPGD

PDOC00009 PS00009 AMIDATION

Amidation site

Number of matches: 2

1	65-68	CGKK
2	121-124	LGKR

PDOC00018 PS00018 EF\_HAND

EF-hand calcium-binding domain

187-199 DADGNHLSSEL

Membrane spanning structure and domains:

Helix	Begin	End	Score	Certainty
1	4	24	1.553	Certain

**BLAST Alignment to Top Hit:**

>CRA|335001101606041 /dataset=GENESEQ /org=Homo sapiens /taxon=9606  
/mol\_type=aa /date=19-FEB-01 /length=842  
/altid=derwent\_ac|AAB19727 /altid=derwent\_id|AAB19727  
/def=Human SECX Clone 4324229-2 encoded protein  
/patent=WO200061754-A2 /pat\_section=Claim  
Length = 842

Score = 507 bits (1292), Expect = e-144  
Identities = 242/243 (99%), Positives = 243/243 (99%)

Query: 1 MKPGGFWLHLTLTGASLPAALGWMDPGTSRGPDVGVGESQAEPRSFVTRREGLSSHNE 60  
MKPGGFWLHLTLTGASLPAALGWMDPGTSRGPDVGVGESQAEPRSFVTRREGLSSHNE  
Sbjct: 1 MKPGGFWLHLTLTGASLPAALGWMDPGTSRGPDVGVGESQAEPRSFVTRREGLSSHNE 60

Query: 61 LLASCGKKFCSRGSRVLSRKTGEPECQCLEACRPSYVPVCGSDGRFYENHCKLHRAACL 120  
LLASCGKKFCSRGSRVLSRKTGEPECQCLEACRPSYVPVCGSDGRFYENHCKLHRAACL  
Sbjct: 61 LLASCGKKFCSRGSRVLSRKTGEPECQCLEACRPSYVPVCGSDGRFYENHCKLHRAACL 120

Query: 121 LGKRITVIHSKDCFLKGDCTCTMAGYARLKNVLLALQTRLQPLQEGDSRQDPASQKRLIVE 180  
LGKRITVIHSKDCFLKGDCTCTMAGYARLKNVLLALQTRLQPLQEGDSRQDPASQKRLIVE  
Sbjct: 121 LGKRITVIHSKDCFLKGDCTCTMAGYARLKNVLLALQTRLQPLQEGDSRQDPASQKRLIVE 180

Query: 181 SLFRDLADAGNGHLSSSELAQHVLKKQDLDEDLGCSPGDLLRFDDYNSDSSLTLREFYM 240  
SLFRDLADAGNGHLSSSELAQHVLKKQDLDEDLGCSPGDLLRFDDYNSDSSLTLREFYM  
Sbjct: 181 SLFRDLADAGNGHLSSSELAQHVLKKQDLDEDLGCSPGDLLRFDDYNSDSSLTLREFYM 240

Query: 241 AFR 243  
AF+  
Sbjct: 241 AFQ 243 (SEQ ID NO:4)

**Hammer search results (Pfam):**

Scores for sequence family classification (score includes all domains):

Model	Description	Score	E-value	N
PF00050	Kazal-type serine protease inhibitor domain	42.2	4.7e-09	1
PF00036	EF hand	11.6	0.2	1
PF00243	Nerve growth factor family	4.0	4.9	1

Parsed for domains:

Model	Domain	seq-f	seq-t	hmm-f	hmm-t	score	E-value
PF00243	1/1	76	85 ..	109	118 .]	4.0	4.9
PF00050	1/1	89	133 ..	1	61 [.]	42.2	4.7e-09
PF00036	1/1	178	199 ..	1	22 [.]	11.6	0.2



1 TCATTCCGAG GTGACTTTTA ATTTCACTCT TATTTTATGC ACAGTAGTTA  
 51 AACAGCTCAC TTCAGATGTT AGCATTCTCT CTAAGGAATA TTCCATACAT  
 101 CTGGTTTGCA GCAACTACCT TCTTCTCCTT CTTTGGGAAG CGTGTAGAAG  
 151 TTCAGTGCCT GTTCACTGCA TTAAACAGAG CTATTCTGA TCTTGGTCAA  
 201 CCTATAGACC CTGATTTACA TATGACCTTG AGTTACTAAA AAACAAAAAA  
 251 TACACAAAGT CCTGCTTTGA TTATGTAATA AGGCCACTAG GCTGACTCAG  
 301 GGACTTTGTG ATCAGAGCTG AGAATAGAAA TCTGCTTTTC CAAATACCTC  
 351 ATGTCTTAGA GGAGAGCCGA ATCCAGCCTC TAAGCCATGG TGACGTTCC  
 401 TGACCACAGA CTTAGAATTA CATTTCAGAG GGAGGCACAG CACATTTCCTA  
 451 AACTTCCCTG CTTCCCTTTA TACTCATTTT CTCTTTTCTG TTTCCCAAGA  
 501 TGAAAAGTGC CATCCCTTCC CCAGTCCTGC CATGGAGAAT CTGGCCCTTA  
 551 GCCAGCCCCA GAAGTTCAGT CATGGTGGCC TTGGCAAAGA TTCATAGTCA  
 601 AATCTGAGAG AGGATCACAC TGGCTAGGGC CCAGGGTCAC TGAGGATGTA  
 651 GTAGCCTTTA TCCTTCTGAG TAAAAATCAT GGTATCCACA TGGGAAGTCA  
 701 ACCAGGTTTT GTCCAACCCC TCATTTTACA AGTGGGGAAG CTGATACCTA  
 751 CAGTAGAGAT ACGATTGGCT CTGCATTACA TAGCTTGGCA GTGATAGAGG  
 801 GAGAGCTGGA CCCCAGACCA AAACGTGTGT ATGCCAAGAC CGCGCTGGCC  
 851 CATTCACTGC TGTATCTCTA GCAACTATTA ATAGCACAGT GCCTGCTGCA  
 901 TTGGAGGGGT TCAGCGGCAG GAAAATCTGT GGAAGGAAAA AACAAACGTA  
 951 ATATCTCTTT CTTCAGGTCA GCCTTCCATT ATTCTTCCCC TTTTCTTTAT  
 1001 ATTTAACTAA CTTCATCCTC AGAAAAATCC CCTCTGTCAC CTCCCCCGG  
 1051 CCAGGACAGA TTACAGAGGC ATGGACAGAA CACTGTTTAC CTAAGCCAGG  
 1101 AAGGCCCTG GTGCCCACGC AGCCAGAGCA GGAGGCAGGC CCTCAGAAAG  
 1151 TCTCCTGGCC ATCAGCCTGG CCTGGGTAGG GGCTCCCTCC TAAGTTTCTT  
 1201 GCCAGACTGA GGCTACGTAT GACCATTAT TGGGCCCTAG TTGTTACAAA  
 1251 GGTGTTTCCA GTTCATTTCG GAAGGAAGAC TGATCTCAA AGCTGCTGAT  
 1301 GTTAAAGAGG GATTACAGAA AGTTTGGGAG CCCCAGGCTT GGGGATGGGA  
 1351 TCAGGATGGG GAAATATCCT GTTCTAAGGG AGAAGGGACC CTCTGGGCCC  
 1401 AGCTAGGTCA GGTAGGCAA TGTCATTGG GATTGCCCT GTATGCCCTG  
 1451 AATGTCTTAA GATTCTGTAG TTGGAAGAGG GAAGATTGAG AAAAGAGAAA  
 1501 ACCTTTGCTG TTTCCAGGT TGTGGGTCT CAACGGCGGG GGATTTCACC  
 1551 CACTTTGTCC CCAGGGACAG CTCTCCTGCT GTGGTGTACC GGCCCGCTG  
 1601 GACTCCACGA GCAATGGCCG CGGATTGAGA GACCCCTGT GCGCCTGGAG  
 1651 AGCACAGCTT TGGGGAACCT GGCCCGGAAA GGAGCCTGGA GGAGAGCAGA  
 1701 GGTGAAGAGG GGCTGTCACT TGCCGAGCTC CACGCTAGCC AGAGGCAGGA  
 1751 GCGCTACGCT GGCCCTCCTC CCTCCGGGCC CTAGATGGCC CCAGCGCTCC  
 1801 CGAGTCATCG CGCCCGCGT GCGCGCCCG CTGCTCCGCG CACCTGCCGT  
 1851 GGCCGCCGCG CGGGTCTGAC CGGCTGGCGG GCGGGCGCG CGCACAGGTG  
 1901 GCGGCGATTG GGCAGGCGGG GCCCAGAGGG TGACGTCACG GGCTCCGGTC  
 1951 CCGGCGGCAG AAATAGGGCA GCCGCGCGG CGGTGGCACA GCAGCGGGCA  
 2001 GCGGCGGCTC AGGGAGCTGG AGCCTCAACA GCCTCCAGCG AGCCCGGGAC  
 2051 CCGCCGACAG CCCGAGAAAC CAGCCGAAGG ACGCGGGGCG GGGTCGCGCG  
 2101 CGCCGCCACG GGGTGTCTCC TCCCTCCCG CCAAGTCCGG CCACCTGGTC  
 2151 TTCCCTCGG CCGCGCGCGT CTCAGGTACG CGGGCGCAGC TCCCAGCGGG  
 2201 CGCGGGGAGG GTGCCATGTC GCTGGCGCCG CCACCAGCCG GTCCCGCTGC  
 2251 ACCCCACTGG GGTCTTGCG CCCGCGGCC CGCATCTTG TGCAGGGCCC  
 2301 GCGCGGGCG CTTGCTTGTC CTTACTGCCC GCGCCGGGAA AGCCAAGTTT  
 2351 GCCCGCGGGG AAGGGACCGC TGGGCCAGGG CTCGGCAGGG CTACCCCGGC  
 2401 CAAGGCCAGG ACTCGAGGAG AGGCTGGGAC GCCGAGGCTC GTGGCCGGGG  
 2451 TCTACGGTGG GGACCGGAGT GACCCGTTG GCACGCGGG CGCCACGCAG  
 2501 AAGCGCTCGG GCCGAGCCG CAGCTCGCGC CCGGCTCCGA AATCCTGCAG  
 2551 GCGCGTTCT TGGGTTCAAG ACCCCGAGCG GCGCCGCGG AGCCAGGCGA  
 2601 GCGCGGCCCC TCGGCGCGG CCCGCTGCC TTGGCTCCGG GTTGGGGCGC  
 2651 CGGGCAGGCA TTCTCAGCAC CTCTCCCCG CGGCTTTGCG GGGAACTTG  
 2701 CGTCTCCTCG CTGCAGCCCA AAGGGCCCG TGCGCTTCGC CTGGCCCTGG  
 2751 CTTCCCCGGG GTCCGCGCA TGTAGGCTG GGGAGGAAG AATCAGGGCA  
 2801 CGACCCGACT CCAGCGAGCC TCGCGCGCTG CTTGTGCGTA GCGGCGCGG  
 2851 GTCCAGAGTG AGCGGCCCCG GGTACCCGCT TGAACGTGTC TAGGGAGCAG  
 2901 TGTGTTGGGG GCGTTCAGCG TTCGGGCTGG GGGCTTGGTC CTAAGAGAGC  
 2951 TTGCACTGTG GATGATCTCC GCCCTCTTTG CGCCCGCAA ACAAGACGA  
 3001 GTTCTGAGTT TCAGGAGGGA CCTGGACGAG GCAGGCACAG CACTCTGCTT  
 3051 TCGGCGCCTG TCGCCTCGAG TTTGGGGACG AGCTGACGCT AGTCTTTGGG  
 3101 GCTCCCTGCA GCGGACAAAG CGGCGCCAAC CCCAGGCCTG CCACCTGAGG

FIGURE 3, page 1 of 188

3151 ACTTTGTGCC CGCAACTCTT GCGGGAGCGG AAAGCCGCCG AGGCAGTGGG  
3201 GTTCTTGT TTCCAGAGCG CGGCGAGCCT CCGCGCGGCG CGGCAAGTGC  
3251 ACTAGGAGTG CGCGGGTCAG CGGGCGGGC CCGCGAGGT CGGTGTCGCG  
3301 GCTCGAGAGC GGGTGCCGGG GCGCTGTCCA GCAGCCCTCG CTCGCGGCCG  
3351 CGGGCCGCCG ACACGTATGA ATGGCGCGGC CACAGCCCGC CGCTCCCCCTC  
3401 TAGGTGTGCG TTCCGCCGAG CTTTCCTCCA GTGAAAAACA GCGCCGGCAG  
3451 CTTGGTCTGT TACCTTCGTA AATTTGTTGC AAGCCTGTGC ACCAGGAATT  
3501 GTACTAGATG GGGCCCCCGA GATACAAACA TCCGTCCAGG TTCTCTGGGC  
3551 CAAACGTAAA CAGAATTTCA ATAGGTGGTG AAGTAACTGC CAGCCAAAAT  
3601 GTTCACCGGG AATGGGCCTG TGTACAATC TGTGAGGGGA AAAGACGGAT  
3651 CAGTGAGCGA CTAGGACTCT TCTTGAAAGT CCTAAGTTAT TTTCTACTG  
3701 CCAAATTTAG GGGAAACCAG CGATGCTTTT TAATAGTGTC TTCTTAATCC  
3751 TGGGAGCCAG GCGCCAGTTT CTGTGCCTGC CCCTCTGGCC CCCAGGACAG  
3801 ACTCTGGGTC TGGTTGGCGG GGGGTCCACC TGGGAAGGGA ATGGTCGGAG  
3851 GTGTGAGTGA TGCAGCTTCT GAGACTCCAG AGCCACAGCA ACTCTCAGGC  
3901 AGGAGCTCAA GCCGGACATA CGAGCAGATG CCCTACAGGG CACGTGTCTG  
3951 CTTCCCATCT TAGCGTTGTG AGAAGGAGGC ACTGCAGCAT CACTAGACCA  
4001 TTTCTGCCAT ACTCTGCTAA ATGTTGCTT TTTCCCTCCC ATCCTAGGAA  
4051 AAAAAGGCAC CACCCTCTCC AAAGACTTCA GACTGAGCCA AAGTTCACAT  
4101 AAGAAAATAG TCCACTTTGA TGTAATGTAT TTAAATTGCT CGTTAGAGTT  
4151 GTCCTAGTGC TTTTTTCTCT CTTAGACTTT TATGATCATC CTCATTTTTT  
4201 GTTGATTCTA GGAAAGCTCT TTTTCTCTG GAAAAGGCCA GCTTGTTTTT  
4251 CTGGGTATTA GGAAACTTT TATCCTTTCG GCTGTGCCCT GGAGGTGGGT  
4301 GAGGGAAGAG GAGGTGGAT TTTTCCACCA TGACCAGTCA GTCAGTGAGG  
4351 ACTTTTTTTC CTTTTACTAA GGGCCGTAGG ACTTTTTAAA TGTGACCTTC  
4401 ACGTTATGAT CTTTGTGTTG ACTTAACACT ATATTCAGAG ACTAGCATTG  
4451 AATAGTCATT GTTTCATAAA ACTACCTTAA CTCTACCTT GCCTGTTTTG  
4501 AGTGTTTCTC TGCAAACCTCA ACCTTCTTGA GTTGCTTATG TCGGGTTAGT  
4551 TGTGTGCTTC CTAGCTTAAT GCAATTAGAT ATTTCAAGAG CACATCTTTC  
4601 TTTACATTTT CTGTCTCAAT GCATAACATA AGGCATGGAA TTTCCAATAA  
4651 AATAGAACCTG CAATCAAGAG CATGTGGTTC TTAAGAGGTA TGAGCTGAAG  
4701 GTTGTAAGGA TAAAGGTTAT TGGAAATCAC ATGTGTGTCT GTGTTAAACG  
4751 TCAGAGTAAA TAGGAATAGA GATTATACA TGGCACATAG AATAATGTAG  
4801 CCATCTAATT TATCAAGTGT TGGGAAGAA TTAACATAATG ATATAGAGTA  
4851 GATAATTAAT AGGAAATGCA ATTTAACTTC ATTAGGGCTT GCTGCAACGT  
4901 TAGCTTGCTA TATCTCCATG CCTAATTTCC CTGGGTGGT GTTTTAGGGA  
4951 CTGTCTTAGG AAATCTGTAC CACTTCTTT TTTTCTAAAA CACTCACATA  
5001 TCAAACTAG GGTGTAAGC CTTTGAGAGG TTCCCGTACA GCCTCCTGGT  
5051 TTCACGCTGG GGTGTATGTG GCTTTTTTTC CCCCTTAAA TTTGAGCAGA  
5101 CATGCAGAAG AGAATTCCAC GTTGATTCA GTCAGTATTT GGAATTCCAG  
5151 AATCCCAGTT GATTTTTATA GTTGATTGC CAACATGCCA TGTATGAAAT  
5201 GCTACACACC TACAGTGTGT GTAGGCGAGA CACTTTTTCA TTTGAAAGG  
5251 TTGAGAATGC AGATGCTTCA GGGTCACAAA TCTGACTGTT CTCTTCAAGG  
5301 CTGGGTGGCA TTGCTTGGTT CTGCCAAATC ATCTTTGTAA TTTCTGGTCC  
5351 TGTGATTAC AAAAAGAAGC CATTTCTGTA TGGCTAATCC TTAATGGCTA  
5401 GTCTGGTAAA GTTACCAAGT TCTGGGAGAG AGGCTGAGAG AGAGAATGGA  
5451 TGAACAATGC CACCGAAACT CTGAGGGCCA GAATTCCCAT TCTTCCCAAC  
5501 AGGGCTGTTT CCTGGAATAG AAAGAGAAGT TTGTATTAAA CCCATTGCCA  
5551 GTTTAATGGG ATTGCTTCTC TCTGGCCTAT GAACTTGGTC AATAAAGACA  
5601 GCTTACATCG CTGTGTGCGT TCTCTGGGTG GGCAGATT TGGTATTTTC  
5651 ATATGAATAC CTATTTCTCC CTAACAATTT GCATTCTTAT TTCATGCTTT  
5701 TTCAGCTTTC TTCAAAAAGC AAGTCAGTAT TTGGAATGTT ACATCATACT  
5751 AACCTGTAAT ACCTCTGTAA TTCTAAATAC AGATAAATAA TAGCACAGAT  
5801 ATTAGCTTAT TTTAGAACAC CTGAAAATCC TGTGGTTTTC ACAAGGAGGT  
5851 AGACAATCTA GTGGAGGTCC TTCAGCATTG AGAAAAGCAA AATCTGCCTA  
5901 TCTAAACAAA GAATCCAAAC TCCCCTCTA GATGTAAGTG TGCCATAATA  
5951 TAAGGAACCA AACAGTTGCC CTGGGGGCGG GATGCCTGGG TTCCAGTTTA  
6001 GGCCTAGCCA CTGATTTGTC CTTGAACCTG GGTGGATTCTG TCCACCTTCT  
6051 GGTCTTCTGG TGTCTATCT ATGCGGCAGC CAGGTAGCA CCAGGTTCTC  
6101 CTGACTGGGG GAATGTCTGT TGAAGCTCTG GTAGGAAACC ACAGGGGAAG  
6151 CAATGAAACA CCTCCCTTCC AAACAAGATG GTTAAAGCAT CAAGTCAGTG  
6201 TACTTTATGA CTGTTTGGA ACAAAGGTA GTCTCAGCTC TTTATATGGG  
6251 GACAGTCTA GGTAGATTA TAATTAATAC TTAGGCTTA GCAAGGATTG

FIGURE 3, page 2 of 188

6301 AATGAACTT ATTAATCTAA ATTGATCTCA AAAGGAGCTC TAGGTTTAAA  
6351 AGGGGATTG TGACCTTATG GATGGCACCT TCCCAATTCT ATAATGGGGA  
6401 GATTCTTGCA TTTGCCCTCA TCTGAAGGCC AGTAGGACTA TTTGAATTG  
6451 AGGAGTAATT AATTTGTTAA CAGATTTACT TCTCCAGAGT GACTAGCCTT  
6501 ATGATGCTGG TGCTCTCCGT GAGCTGAGGG GCATCGGCCT GGGATTCTGT  
6551 GCATCTTTTT ATGGTTCCCC TCCCTCCCTC CCTCCCTTCT TTCCTTCTAC  
6601 CGTATTTTTT CTTAGCCCAT AAATAGAGCA GCAGTGAGGA CTGAGGAGAG  
6651 TCTGCCCAGG GGCCCCATC CCGGGGTAGA ATGTGGGAAT TAAGGGTGAG  
6701 CAGCTTGGCT CTCTGCCCTT GGTTGGAGCC ATGAGGAGGA GAGTAGCTCG  
6751 TGGCAGCTTT CAGAGGAAAG GAGAGTCTCG GGGCCAGGGC CTCCTATCTT  
6801 ACTGTCTCTA GATTTTCCCC ATTATACTAA AAACAACGTG TTATCAAAAC  
6851 AAAACAGGCA GGACAAAACA AAACAGACAG GCAGCAGCAG GTGGGAGTTA  
6901 AGAGAATAGA TGTCGTGGGT CTACGTGCCT GACTTGAAT TTCAGTTTGT  
6951 CCACTTGTCT GCCACATGGC CTTGGCAGAG TCCTTAACCT CTCTGTGACC  
7001 CCATCTCCTC TTTCATCTGA TTGAGGGATA ATCATTGCCC CCATCATGGA  
7051 GTAGAAAAAG GAGGGTTATG AGTTAATACC TGTGAAGTGC TTAGAACAGT  
7101 GCCTGACACA TCGTAATTGC TATATAAGTG TTAACCAAAT AGATAGTCTC  
7151 TATTTGATTA TTAGACAGAT AATCAAAATT GATTTAGACC CAATATTAAT  
7201 TCCTTTTTAT GAACTGAAC GTCATAAAAC TTGAGCTGTA AATTTCCAGG  
7251 CTGTTGTGTC TGTAGATATA ATGAATTGTC AATCACCGTT AAGTATAAAA  
7301 TGACATCTAA AACACATCCA CAGTGCAAAT GAAATCACAG CTAGTGGTAG  
7351 ACAGACTGAG CTAACTTTA CAAACAAGCT GCCCAGGAGT ATTTCACTAG  
7401 TTGGCCTGGC TCATGTGTTT TCCTGTTTCC AGAGTTTTC TGTTCCAGA  
7451 TACAATCTTA CAGGAAATAT AAACACAAAC CAGATAAAAC CAGTGGCAAC  
7501 TCCAGGCCAA GCTCCAGGCT TGGATCTTGG GCCTCCTGAA ACACAACCCA  
7551 GAAACCAGCA GTCTTGGTGC ATCTCTTAT GAACTGATTT GCGCTTGCC  
7601 AAAATCACAG TTGAAATGAA TATATTTTAT TTAATGCTA CCCATTAGTA  
7651 CCAAAACATA AAACATAATT GATCTTAGAT TACAAAGCAG ATTAAGGTT  
7701 AAATACCAGA TTTTGTGGCT TATGTATTTT ATAACCTCAA GAGTTGACAT  
7751 CTGTACATTA CCTAGAATAG ATTGGATTA TCTTGCTGTT TTTGCTTAT  
7801 GTGAGCTAGG AGACATGGAA AGGGAGAAAA GTAGACCTTG CTCTGTGTGT  
7851 TTACTCTGTG AGCAATGTTT GATAGTAGAT AAGTAGGACA AAATTAATGA  
7901 GAATAAGAAG CAATGTCTTT CTAGTTCTAG CTAAATTTT TATGGCTGGT  
7951 TTTTAAAAAT TCCAAAAATC CACTCGCTGT TTTCTGCAGT CTCTGGAAAG  
8001 TGGCTCTGCA TTCAGAAGAG GATTACTTAT GGAGAATAGG GAGTTACCTT  
8051 GTTTATTTTT AGAAAAATGG GTTGCAGCTC AGCTGGGCAT GGTGGCTCAT  
8101 TCCTATAATA CCAGCACTTT GGGAGGCCGA AGCAGGTGGA TCACCTGAGG  
8151 TTGGGAGTTC GAGACCAGCC TGACCAACAT GGAGAAACCC TGTCTCTATT  
8201 AAAAATACAA AATTAGCTGG GCATGGTGGC GCATGCCTGT CATCCCAGCT  
8251 ACTCGGGAGG CTGAGGCAGG AGAATCACTT GAACCCAGGA GCGGAGGTT  
8301 GCAGTGAGCC GAGATCGCAC CATTGAATC CAGCGCAGGC TACAAGAGTG  
8351 AAACCTCCATC TCAAGAAAAC AATAAAAACA GGTTCAGTT AGGGGAAGAC  
8401 ATTTTATTTT TAAACAAGC ATATGATTTT CTTTCTCTGC TCCTTCTCCC  
8451 TGTAAGATTT CACACACCCT AGCTAGATCA CTGGATCAAG AGCGCAGAAG  
8501 CCATTGGGGG GCAGGGGAGG GAGTGCCGTG ACTGCCGCAG TCCTCACAGT  
8551 CCTCTCCCGG GTGGCAGCTG AAGCGGCATT ATTCCACTCA ACTCTGCCTT  
8601 CTTCAGAGTG TGGGGCAGGT GCTGATGGTG AGACTGTGAC CTTCAGATTA  
8651 TATTTACTGA CCACCCAGAC TCTTTTCTCTG GTAGCTCAGC TTTGTCAACA  
8701 GATGTCAAAG ATGAGTGACC GAAGAAACAG ATATAAGAGT GGGAGCTTAT  
8751 GGACTCTTTT TAAAACAAGC AGACACCTTC TCTTAAAAGA CAGTCATGCC  
8801 TTATAACCTT GCCTTTTCTAT AGGCCAGTGC CATAGGCCCA CAATTTTGAG  
8851 TCTGACTTCT CCTCCCTGTG GGCATTTCTG TCTCCAGCTG GAGACATAAA  
8901 GCAGATGTGG AGAGGCAGCT CTATTTGGAT GTGGATAGCA GCCAAACAAA  
8951 ACCTGGAATG TGGCAGGAGT GTAATTGTTT GCCAGCCCTG GACTCAGCAC  
9001 TAGTGACTAT GTGACAACTT CCACCCCAT TGTCTAAAGTA GGGATGCTCC  
9051 AAAGCTGTTG CCTATGGCAG TGAGCAGGGA TGGACTGCCA GGTCCCTCAA  
9101 GCACCCACTT CTTTCTGAAT TGGATGTCTG TTCTGGACCA GCCCTAAGCC  
9151 AGTTCATGCT GGATGCTGGC CTCCAAGGAG CTCCGGTGTC TTTAACTCAC  
9201 CAGCCTAGAT CAGGATGCAG TGTGGACCAT ATGTGATTAA GCACTAAATT  
9251 GTGTGTGACA AGCAGAAATC AATAACCCCT AAAGTTTCCT TGAGTAGGGG  
9301 TTCTAAGTAC TACATAATGA GTTGATCTGT GTTATGTTTC ATAATCAGAA  
9351 TACTGAAATT ATGGTTGGAC TGTGTTTACA GTGGAAAAC TTTTCCAAAA  
9401 AAGTACAGCT TATTGGACAA GTAAGATAGT CTGTATCCTC ATTTCTCAG

FIGURE 3, page 3 of 188

9451 CACAATGCTT AGCACATGAT TTGGACTTGA ATATTTGTTG TAGCTGATCC  
 9501 TTAGTTTTTT CATCCATGTG ATTATTTGAT TACCTTGAAT TGCTCACTTC  
 9551 TTGTCTTTTA GGACTGTATA CAGTAATGTT ATCAAGTGAG CCTCAGGAAA  
 9601 CACCTCAAAG GTTATTGAAA TTCTGTTATC ATTGGATGCT TGGATTCTGC  
 9651 CACAAAAAAT GGTTGGTCTT GAAACTAAGA TATTAGACCT TATGATGCCA  
 9701 TTTTGAAGCT CACTGTCTTA TAAACTGAGG TGTCGGCTGC AAATGAGGTG  
 9751 CCAGAGATGT AACATAATTC TTAATCATCA TTTCTTTTTT TGAGACAAGA  
 9801 GTCTCACTCT GTCGCCCAGG TTAAAGTGCA GAGGTATGAT CTCGGCTCAC  
 9851 TGCAACCTCC GCCTCCCGAG TTCAAGCGAT TCTCCTGCCC CAGCCTCCTG  
 9901 AGTAGCTGGA ATTACAGGTG CCTGCTACCA CGCCAGCTA ATTTTGTAT  
 9951 GTTTAGTAGA GACCGGGTTT CACCATGTTG GCCAGACTGG TCTCAAACCTC  
 10001 CTGACCTCAA GTGATCCATC TACCTCCGCC TACCAAAGTG CTGGGATTAC  
 10051 AGGTTGTGAG CCACTGCGCC CAGCCATAAT CATAGTTTCT CGAGCACTAA  
 10101 TTGTGTGCCCT AGCCCCAAAT GCTTCTCAG GAAACTAAGG CGTGGCTATA  
 10151 TGGCAGCCTA ATAGAGGTGA CCCACCTGCC TCACCCTGGT TTGTCTTAT  
 10201 AGATGTAATG GTAGTGGCA TTTCAAATGG GTTCCACGT AACAGCATTT  
 10251 ATAGAGTTCT TACTCTATGC CTGACACTAA CTCCTTCAAT CCTCACAAAA  
 10301 GCCTTTCGAG TTACATATTA TTGCCATTTT AGAAATAAGT AACTAAGGC  
 10351 TCAGAAGTAA TATAACCTCT CCAAGGTAGA ACAGAAGTTT GGTGCCAGGA  
 10401 TTTAAACCCA GGCTTATCTG ATTCTGGGGA ACACATACTA ACTACTGTG  
 10451 ACTTATTATA TCCATCTCAT AATGTTTTAT TCTCAGCATT TGTCATTTCT  
 10501 TCAACAGACT CATCAAAATG AAACCAGGAG GCTTTTGGCT GCATCTCACA  
 10551 CTGCTCGGAG CCTCCCTGCC GGCTGCGCTG GGATGGATGG ACCCAGGAAC  
 10601 CAGCAGAGGC CCGGATGTGG GTGTGGGGGA GTCACAGGCA GAGGTATAGT  
 10651 CAAATCCCTG CGGACATAAC ATTTCAAACCT GATTGCTTTC CGATGTTACA  
 10701 GTATCTGATT TCCCTCCAC CTTTAGTTTA GATCAGTTAG ATCACAAAGT  
 10751 GAATTAATAA TGCATTCTCT TTTTGGTGGG GACAGAAGAA GGCAACCTGT  
 10801 GTGGATACAG ACAAGAGGTT GATAACACGA CGTGAGTAAT GGCTCTAAAA  
 10851 CCTCTCAGAT GCTGAAAGTG TATCCGAAA CCAAGCTTGA ATTGCCTGGT  
 10901 TAGTCTCTAC AAAGACCCTC AGGAGAATGG CCTTCTGTA TATTTAATAA  
 10951 AACTCTGAAA ATGCAGAGTA ATTGGTGGAG CACACCCATG TGAATTAGTG  
 11001 AAGTATTTTA ATTATAAAAT ATATTTGAAA AGAAATGGAC TACTTTTCAG  
 11051 GTATATAGAT AGAAAGCACC AGGCTGAGAA AGAACTGGCA AGTGGAGGTC  
 11101 CTAAGGGAGA GTGCTTTAAT GAACAGATAA GAATGATTAA TGGCATGTTA  
 11151 GGTATATATA AATGCTTCTA AAGTGCTTGA AAAACTTGTC CTCAAATACC  
 11201 TCCCTGGAGA GTCTGGATGT TCTGCTAATT GCTTAGTGAA CCCTGGTCTT  
 11251 ATGTAGTAAA AGGATCCAT AAAGTCAAC CTGGCCCTCT CCAAGGTAGT  
 11301 AGGTCCCATG AATTTGGGGT TCATGGGCAA AATGTATTTT TCTGCAGAAA  
 11351 ATGCTTTGTG TGTGCTGACT CTTAAGGAAT GACTTCACCC TTCCATTAAA  
 11401 ACCACCTGGG ATTTTCTCTA TGCTGTGATG AATACTAATT CCTAATAGGC  
 11451 AGCTTTCCAG GGCACCTTTC CTCCCATTTG CTTCCTTGAT GCCTGCCGTT  
 11501 CTCTTTTCTT TTGTCCTGT TFCCTGTCTT GCGGAATGAG AAATAAAAAAT  
 11551 TACCTCAAAA AGTCAACATT CCCAGAGAGT GAATAAGGTT ACTCAGTGTA  
 11601 GGGTAGGATT AATGCATTAT TTGATCAAAA GACATGATTT CTCTTTCATT  
 11651 ATTACTTAAT TGTAATGCAA TCCCAAACCT ACCAGCCTTA ATCTTTGGGG  
 11701 AGCCTCAGAA GTAATTTAAT GTACACTTTT CCTGCAGAAG TTAGTGTGCC  
 11751 TTCCTTTTGT GGTGAGCAGA TGATTAAACA GAAACGCTAT CTCTGCCGTC  
 11801 TAAATCCATG AAGGACGCAA TTTAATGCTC TTTTGAAAGA GTCTGGAGGC  
 11851 TGGCTTGCTG GTGAGAACAG CATTTCCCTT ATGGGAACAG CTTTATCAGT  
 11901 ACACTCATAT CCATACCAAG AGAAAATGAT CACTTAAATC CTACACATAT  
 11951 ATTGTTGAAT ATTTAATAGC AAAGCAAACA GACAAACACA CAGGTAAGCT  
 12001 TAGTCTTCTT ACTATTGGGG CTCATCGGCC CACTGTTTTA AACCATTAT  
 12051 TTCAAATAAA AGTATCAAGT CAATTAAGGT GGGATTTAGC TGGAGGTAAA  
 12101 TTGAAGGTAA GTTAATATCA ACCCAGGGCC TCTTTATCTT AGCTGTTAAC  
 12151 ACCCTAATTC TTTGTGTGCC AACAAGAAGG AGCAGATGCT GGTCAATTGGG  
 12201 AGGAAGTAAC GTTTGTGGG GGTGTTTATT TTGCTCCCTT GCAACCCCTG  
 12251 CTCCAGGGTA GCTTTTGTCT TCCAAGTCCA GGAATGTTGC TGCTTCAGGA  
 12301 AAGGGAGGTG ATGACTGTGT AGATTCTGCA CCACAAGAAC TATTGCCCTA  
 12351 TTGATCATAT ATATAGTTTT TTGCTATAGC TTTTGTTTTT GCAGTATTAT  
 12401 AACTTCTAAT CATTGAAACT GTTTCTATCA GTGATTAAAT GAGATGATAA  
 12451 TAATGGGAAT GGGCCTAGGG CTTAGGATGG CCTAGGTTAA AGGTTTAGCT  
 12501 GCAGAGAACA GAACACTTCC AGGTACGGTG GCTCACACCT AATAATCCAA  
 12551 GCAGTTTGAG AGGCCGAGGT GGGCAGATCA CTTGAGCCCA GGAGTTCAAG

FIGURE 3, page 4 of 188

12601 ACCAGCCTGG GCAACATAGC AAAACCCTGT CTCCACTAAA AATACAAAAG  
12651 TGAGCTGGGT GTGGTGGTGC ACTCCTGTAG TCCCAGCTAC TCGAGAGGCT  
12701 GAGGTGGCAG TACCACCTGA GCCTGGGGAA GTCAAGGCTG CAACAAGCCA  
12751 TGATTGTGCC ACTGCTCTCT AGCCTGGGTG ACAGAGTGAG ACCATGTCTG  
12801 AGAAAAAAGA AAAAGAAAGA AAGAAAAAGA AAAAAGCTCGA AGAAAAAAGA  
12851 AGAAAACAGA GAGCAGAACA TTTATTTTAA TCGGTTTGTT TGCAGCCCTT  
12901 GCTCACACTC TGTTTCATCCC TCCATGCACC CCCATGCCCC TGCCCACCAG  
12951 GGGCCTCGTG CAGAGCGTGC TGTCTCTCCT TTCTATGTCT TTGCTTTCTA  
13001 CACCTGACTC TCCTCCTCCT TCAGGGCCCA GCTCTGGTTC TTACTTTTTT  
13051 TTTAGAACCT TCTTTGACCA CTCTTGGTCA CACCTGGTCT CTTTTTCTGA  
13101 ATTCTTAGTC CTTCTTTTCT CTTTTTGTTC TCTTACTCTT TTATTTTAC  
13151 GTTAGCATAT GGATGGAGCC TGTCTTATTT ATCTTTTCTT CCTTACAGTG  
13201 CCTAATAATT TTATAAGCAA AATAGAGGTT TGATGCATTT TTAAGCCAAT  
13251 CGATATTTAT GTGACCTTTG GTCCTGGTCA TAAAGTCACT CTGGTGCTTC  
13301 CAAAATTCAG ACCAGACCAT CAGGTATTTT AGCGCAGGGC ATACCTCCCT  
13351 GCACAGCAGG TTCATTCCCA GTGGGGACGT GGATGGTTTT CCCAGCAAAA  
13401 TCTGTGAGCA GCCTGCAGGC CGGACAGGCT TGCATCCTAA TATCCAAGAT  
13451 AGTCCCTGCG TGTTATAGTT TCTGGGTAGT TTATTATTTG AACTGTAGCT  
13501 ATTAATGTAT CGATAACTCA CAGTCCAAAC CATATTAAAC TCCTCTAGCA  
13551 GTTCTGTCAG ACAGTCTTAT TTCCTGGAAG AATCAAAACC AGCAGAGTTT  
13601 CCTGAGACTC TAAATAAGTG AAAAACCTTT TTCAGGAACC AGATATTAAA  
13651 ATGTTTCTGC ATTTCTTCCC AGTAGTAGTA CTTACACAAA ATACTCATTG  
13701 ACTTAAGATT TTTAAAGTAC TTAGAAAGCG TTAATAAGAT TTGATTTACC  
13751 TTTAAAGTTA TTATACCAAT TACTTGATTG ACCTAAGGGT AAATAAGAAT  
13801 TAAATGACCA ACGCGTGTGT GTGCACATAT TTTTAAAGCA ATTATAGCAA  
13851 GTGTTAAATT ATTGTTTTAT GTACAAAGAC TGCAGTGGAA ATAGTTTCAA  
13901 GGAGTTTACC ATTTTACAGA CATAGATAAA AAGAAATACA GCTGGGTGGA  
13951 GTGCCTCTTT CATAAGAGTG GAGTGGCAGA ACGTGCCCTA GAATACTAAT  
14001 GGAATCTGA ATTCAGAGGA AACAATTCTG AGAGGTACAA TTTATTGAAA  
14051 TAATGAAATG TTGTTATATC CCCCCCCTT TTATCCTACA CAGATGCATT  
14101 TTGACTTATG ACGGGATTAC ATCCAAATAA ACCCACTGTA AGTTGAAAAT  
14151 ATCATAGGTC GAAAATGTAT TTCATACACC TATCCTACCA AACATCGTAG  
14201 CCTAGTCTGA CCTGCCCTCA GCATGCTCAG AACACTGACA TTAGCCTACA  
14251 CTTAGGGCAA AATCATCTAA CACAAAGCCT ATTTTATAAT AAAATGTTGA  
14301 ATATCTTATG TAATTTATTG AATACTGTAC TGAAAGTGAC AAACAGAAGG  
14351 GATGTATGGG CACTTAAAG TACGATTCTT ACTGAATGTG TATCATTTTC  
14401 ATACTATGCT CATGTTGAAA AATCCTAAGT CAAACCAAAC CTAAGTCAGG  
14451 GACTGTCTGT ACACTGGTCA AGATAAATAT AGTAGTAAA TCAATATTGA  
14501 TAGAATTTTG TATTTGAGGG GGAACCAAGG AACCAGGAAG GGGTGAGAAG  
14551 TGATATGGTA GCAGCCTCCA GAGAGCATACT GCTGTTTTGA GAAATAGGCA  
14601 TTTGTGGGAG CCCCCACTT TTGGGGCCTG GGTGCTGCAG TGGCCGCCCC  
14651 CCCACTTTTG CAGCCTGGGT GCTGTGGCGG GAGCCTCCCC TTTTGGGGCT  
14701 AGGGTGCTGC CATTGGAGCC ACCCCATTTT TGGGGCTGG GTGCTATGGT  
14751 GGGAGCCTCC CACTTTTGGG GCCTGGGTGT CGTGTTCAG CACCAGCATC  
14801 TCACCCATTT GCTGGGCTCT GAGATTGAAT GGTGGGCGTT ACATGGTCTT  
14851 ATACGTCTTT CATGCATTTT ACTGAATTTT TTCTAAACGA CTCTTACCCA  
14901 TGGCATATAC ATAGTCACGT ACTACATACC TGTACATGTT AATATTGATT  
14951 CTTTCTTAAA TTGTCACCTC ATGTGCCTCA GTGCTTATAG ACCAGAGATA  
15001 GGTTTTGAGC TCAGACACCA TGGGTTTTCA GTATTTGCAA ATTCTCTCAA  
15051 AGTAAAGTCT TTGCAGAAGA AATATGTGGA GTGGTGTGAG CTAACCTAAA  
15101 CATGATTCCC CGCCTCCCTA ACCTCAGGGG TCAGCCTAAG ACAGCATTGA  
15151 TCCTACCCTG ACTGACCGGC CCCTTCCCCT TGCTACAAGT GTTGATGGCA  
15201 GGCATGACAC TCCTGTCCCC GCGAGGCATG GCAACCTCAA ATTGCAGAGT  
15251 CCCTTAGATG CTCCGTGGCT TCGTTCCGCC TTGGCTGGGC ATTCACTAGT  
15301 ACTTGGGCTG CTAAGACTGA GCACTGATTT TTACAAAAAC ACTTTCACTG  
15351 TTCTTATGTA TTACTGTCT TAACGCTAGT GTCCCTCACC CCAACCACC  
15401 CTTTCTGATA AAATTCTCCC CACCACCAT AACCCTGACT GTGCTCTTGG  
15451 ACTGATTACT GGGGAAGAAC AGCTGGTCGT CTGTAGGGCT TGAGATCTGC  
15501 CCGTTGGTGT TTGTACTCAC CCTGGCCCTC AGCTGGTTTG TGGGCATAAA  
15551 TAAAAGGAAC TCCCTCTTCC CGGTGAACCA ACGGGGTCC AAGCTGGACG  
15601 TTCGCATTTT CTTAAGCCTC ACCTACAGTA CGTGTGCATC TCTCATGGCT  
15651 TTTCTGCCGC ATCACCCTTG TGATACTCAC CATTGCAAA TCTAGTACTT  
15701 GACTTGCTTT CAAAGAAGAT GAGACCCTGG GCAAGGTCTC TCAGCAAGAG

FIGURE 3, page 5 of 188

15751 GCGAGAATGG TCTCCCCAGG GCCGTGGACC CCTGGGATAA CCGAACCACG  
15801 TACTCCTTTC AAAAGGATCC AGAACTTCCT CTGCAGGTGC GGTGCTGGTT  
15851 GATGTGGGGG CCACCTTCTCT GGGCCCTAA CACTTAGCCA GGGCTTCTG  
15901 CTGATTATTC TGAGTCAGAG GATGTGGATA TTCGTTTTTC AGGTACAAC  
15951 GGGAGGGCAC AACCTCCAC CTATAGACGT TATCAGTACA TTTATAATTT  
16001 TCAAGGCAAA TGATGGTGGC AGAACCTCCC AAGGTCTCAG GGGCATTGGG  
16051 ATTAACCCAT TCCCAATTGC AGAATGGGGT GTGCTGTAAC CTGTGCCAGC  
16101 ACCTCTTGAG ATGCAATGTG CTTGTGAACG GTCTGGGATC TTGTTAAAAAT  
16151 GCAGATTCTA ATGCAGCAAA TCTGAGGTGG GTCCCAAGAT TCTGAGCTCC  
16201 AGGTGATGCT GATACTTCAG ATCCTGGGGG ACCTGGGAA GAAAAGCCTT  
16251 AGAGGAGCCC CCGCTCCTT CCCATGCACA CACACAAGGA GAATCCCAGT  
16301 TGGATTGACT CTGGCCTTTT TTTAGTTCTT GCTGACATGA TGCTGACTGC  
16351 AGTCAGGGAA AGGAGAGAAA TGGGCAGGCT GCAGTCATGC TGGAAAATAG  
16401 CTTGATGAGA CTAGCTTAGT GGGCAGGTAG GTGATGGGAA AGATGAACTT  
16451 AAACAACCTT GGTCTAGGG TCATTTCAC CTGTTTTCAA GCAGCTGGAC  
16501 AGGTAACCTT CACTCTTGA ACCCGTGGCT CCTCCCTGGC TTGTCTGTAG  
16551 GTGGTTTTAA ATTCTGAAAG AGGTGATTTT AAATGCTGAG GCTTAGCCCA  
16601 CACCCCTGC TCCAAGGACC AACAGCGCAC TCACTTCTTG CTTACCACCG  
16651 TGGCTCCCCT TCTGGTGTCC TATCCCATCT CTGTCCCTAG GCCCAGCCAG  
16701 CCTGTTTTGG GGATGAGCAT TGCTGCATTG GTGAGCTGTT TTGGAGTCTT  
16751 GTTTTTCTCT TTATCCTTGA ACAGGGAAAG TCACTGTCTT TGTTCTTTGT  
16801 GTCCTCTCCA CTGCTCCCAG CCAGCCCTTC CACACTGTAC CAGTTAGTGC  
16851 ACTGTGTGCC TCTTGGTAT TTTGAGATCA TAGTTGACAA TTTAATTGG  
16901 CCCTGAAAAG TCTGTGACC CAGGAAAATG AGCATTATATG AGTTCACAGA  
16951 AACCATTAT TTTCTTCCT CTTAATTTAG CATTACTTG TCTAACTACT  
17001 TTATTTATTC CTCTGTTGCT AAATTATCTA TACTCCTGTA GGAACTTCC  
17051 CACCCTTGTA ATGAAGACAT CAGGCTGTGC ATTGTAAATG GGGCTCCAAT  
17101 TTCTATTTTT CGGGGAGTTG GCAGCACAGA TCTGCCAAGT CCAATCATC  
17151 TGCTTGATTT ATCCCCTACA CCCTGTGGGT TGTTGCTTTT GCTTCCCATT  
17201 TGGATGGAAG TAAATGTCGT CTTGTGTCA GGCAGGCTCT AACAAGGCC  
17251 AATGAGTGGG CTCTACTCTT CAGGCCTGCC AAGCCAGAGC CATTGTCCTT  
17301 CTGCCTCCAT GGCTGTGGTC TCTGCCACTG GCTCCTGGGC TTTGTCTTGT  
17351 CACCAGCCAC CTGGGAGGTG GAGCATACTG GAACTAGACA TGGAGGATGT  
17401 GGGAGGATAT GGGCCCAGTG CTCTGAGCAG GCGACACCGA GAACACTGTG  
17451 GTGGGTGCTG GCACATTGGT GTTGGGGGGA GGAAGTGTGG CCAGGTGGCT  
17501 GAGAAGCCAT CTGTCCACCA GCCTCGCCTC TCTCTTGATG GGTAGCCATC  
17551 CTTTGGGGCA TTCCCTTCAG TCAGGAAGGT CTGGAACAAG AGAAACCCAA  
17601 TGTCTTTCCT CCTAATAAAA ATCAGCCTTG TTTTACTCCT GCCAGGAGTG  
17651 TGTGCTCTTG GCAGAGGTGA AGAATGAGTG TGAGTGGCCT GCGGGGCTGA  
17701 GGTCTTCCCT CAATCACAGG GTGAGTTTCA GTTTGATCTT GCACAGGGGT  
17751 TGGGGTTGGG AGAGCTGGTG CTGGTGCTTG CTTTGGTTAG GAGACTCTGA  
17801 GAGCATTTGTC TTCCCTTGGT CGGTGGGACC GGGCTAAGGT AGCCCTGTC  
17851 TACCTGCTTG ATGTTGTGTC TAGACACTGA GCCCTTGGCT TTTCTTCCTT  
17901 TGTTCCAAGA GGGCCTTGGG TGCAAATCAA AACCCTTCTG GAGGGCTTAG  
17951 CTGGAGACGG AAGCTGCCAT TGTTGCTTTT GTTAAAATAC TTTGAAGGTT  
18001 AAGGTTTTGT GTTATTTGGG ATCTAGATTG AAAACTGTGT GTATTTTCT  
18051 TTTTAAGAGT TGAGAATGGA AGTCATATTC TATTTCTTGC AAAAGCCCTT  
18101 TCCAGAGAAAT CAGTGAGACC ACCAGTGAGT CTGTGATGCA GCTGACAGAA  
18151 GCGCCTCCCC ACCTGTGAGG GAGTTGGCCT AGCCTCAGAG GTGACAGACG  
18201 CCTCCAGCAC AACCACGCT TCAGCCCAG CCAGGGGCCT GGGCCCTGA  
18251 AGCATGGCCT GCTTTTTTCAG AGGACGTCTC TTCCCTTGCT CAGGCTGAAA  
18301 GTCCTCAGTG CTTCTGGTGG CCTGCTTGGC TGGTGGCAGG GCTAGCTGCT  
18351 GGTATAGGCA GGCTGATGTG CACGGCTCTC TAGGCTCCTG GGAGAAATGG  
18401 CTGCTGTCTT CCTCCCCAC CATAGAACCC TGTTAACTCT CACCTTGTGT  
18451 GTTTCATGTT GCCACTTCTT CCTCCAGGAT GTTTGTTGTT TTAACCCCC  
18501 ACAATTGTTT TTTCTGTTG GGGCTAAATC ACTTTGCCTC TTGCCTGTGC  
18551 TGCCGCTTAA GGCATCCCCG GCCCTGCCTT TGCTTCAAGT GCACCTCAA  
18601 CTCAGAGGGC CCCGGAGGCT AAAATCTGTT TGTTCCCTAG CCAGCTTTGG  
18651 AGCTAAGGGA ATCGCCCTCT CCAGCCTTTA GGTTCGCCAC GAGTGAAATA  
18701 CAGGCAATAT AACAATACCA TTTTCAGGGT TGTCATGAGC ACTAAGATGG  
18751 TACATGAGGT GCCCGGCACA GATTGCCTCC ACAGAACACA ACAGACAGAG  
18801 CTGTGGTTTT GTGTTGTCA TCCAGAACC TCAGTCAGTG GCTGTCAAGA  
18851 AGACTGTGCG CCTTCCTGA GCCACAGTCT GATGTGTCAA CTTAGCTGC

FIGURE 3, page 6 of 188

18901 TGCAGTTCTT GTCAGTCTG GCCATGGCCA CATATCACGT AGCAAGGCAG  
 18951 CCCTCAGAGT GGGAGGGTCC TCTTTCCAGT GGAGTGGTAA ATATCTTGGG  
 19001 ACTGGGCCCC ATATCCTCAG TGTCCAGAAA GCCTGGCACA CAGCAGGATG  
 19051 TTCAGATATT TGTTGAATAA GTGAACGAGT CAGCCATCTT TTACTATTCC  
 19101 TTTTGTCTATC GTATGGGGTT TGGACAAGGT GTCTTGAGTT TTGGGACTCC  
 19151 TTACATAAGA AATCCCAGGA GATAGTCACT GGACTCCCTT GGGCTTCCAC  
 19201 ATCTGATAGA ATCCCATCAG TTTCAAATCT TCTTAACCTT CTTCTTGAAC  
 19251 CAGGAGAGGC TTCAGAGAAT CGTATGGGAT GTGTGTAGGA ACAGGTGGGA  
 19301 CCCTGACTCA GTTGCCATCC CCTTCTTAGA ATGGCTTTGA GGGCCTGCTT  
 19351 GGCTCTGACT GTTTCTCTCT CAGAGGCCAG CATCACTGGC AGGCAGCCAG  
 19401 ACCCTTGCCA AAACCATGAA TCCAGAGAGT GAAATGTAAA GTCAAACAAA  
 19451 TGCAGGATGC TTTGTTTGTG CTTAGAATTT TCAGGGTCAG TAGAAATAGT  
 19501 CTGTGGCTCC GGGGTAGGTG GTTGCCAGCC ATCTCACAG AGGGCAGAAA  
 19551 GGAGCAGAAC TACTCTTTTA AAATGTCATT AAGTAGGTAT AAGACTCCTG  
 19601 ATGGCTTTCC TTAATGCCAG TCTTAGGACA ATTGAACTGA AAGCTTGTTT  
 19651 GAGCTCTGCT ATCATTTAAA GCTTGCTCTC TAAGTAAAGA GAACAGAACT  
 19701 CTTTTTCCAT TTATTTCTCT TTCTGGCCTT GCATTTAAAC GTCCTTGAAA  
 19751 ACTTTGGTCT CTATAGAAAA GATGTCAAAT TTCTGTTGGT TCTGCTGATG  
 19801 CCACATTTTG AATGTCCATT CCAGGTAAGT AGGCTTTCAT GTGGGGATGC  
 19851 TGGGAGGTGT CAAACGGGAG AGGCCTGCCA GGCAGATACT CTAATTAGAG  
 19901 TGGCTCTAAA ATATGCCCCA TGGTGCCTCC TCTTCTTCCT CTGCTATTTT  
 19951 CTGTTTGGT GTTACTGCTG TTCTCATATT AGCATTTGAA GAGTGAAGAG  
 20001 CAGGCTTCTG CCCGGGTGCA GTAGCTCATG CCTGTAATCC CAACACTTTG  
 20051 GGAGGCCAAG GCGGTCAGAT CACCTGAGGT CAGGAGTCCG AGACCAGCCT  
 20101 GGCCAACATG GCGAAACCCA GTCTCTACCA AAAATACAAA AATATTAGCT  
 20151 GGGCATGGTG GCACACACCT GTAATCCCAG CTAATTGGGA GGCTGAGGCA  
 20201 GGAGAATCGC TTAACCCAG GAGGCGGAGG TTGCAGTGAG CCAAGATCAT  
 20251 ACCACTGCAC TCCAGCCTGG GCAACAGAGT GAGACTGTCT CAATAAAAAC  
 20301 AAAGTAGGCT TCTCTGCTTC ATGCTTGAGT GTTCATGCCT GGCAGTATGG  
 20351 CTTAGGATCA TATCTTTGTG TCCTGAAGCA GAAATTCCCA TTTGACTTTC  
 20401 TCTTATCCCT ACCTAGAGGG TCTCTGAGCC CTGGGCTGGC TTGGCCAATC  
 20451 GGGACATCTG GTTGAATTAA ATCTTAGTAA TCAACAGACA CCCACTGAGC  
 20501 ACCTAGCTGT GTGCCTGGCC CTGTACTAAG GCTGGCTAAG TGGTTGAAGA  
 20551 GAAATGGGAT TTGTGATTCT ATCCTTGAGG CTTGAGGGCC ATTGGGGTGG  
 20601 GGGTGGGAGG TAGGAGCAAT CAGCTGCTTC AGAATGGATT CCAAGTTAGC  
 20651 AGAAGGAATC ACCTACATTA GTTAATGATC TTTTCTAGT CTGTATATAA  
 20701 TGTCGAAATT AAGATCTCAA CTTTAGCCTA AAGAAAAGTG GGCATATTTA  
 20751 TTAAGTAATA AAGAAGGAAG TACATCTTTA TTAGAAAGAA GTACATCTTA  
 20801 ATAAAGAAAG AAGTCCATCT GCCTCCCGGA TTCCCCACGC CTGGTCCCAG  
 20851 GACACTTGTG CTCATAGTCC AGACATTCCC TGTCCAGGTG CATGTGGCTG  
 20901 ATAGCAGATC TGGTATCACA GGTGTGCTCT GGGCCCTGGC TCAGCTGTTC  
 20951 TAAAGTCTTT AAGAGTGCGG GTTGGGGGCT GGAGGAAGCC GGAAGTCTCT  
 21001 AGGTGTACAC TGCATAGGAT GGACATAGTG CTGAATGCAG CAGCCCTCTG  
 21051 GTGTCCAGAA CCTCCACAG CCCCCTCCTT TACCGTCTTT CAACACTCCC  
 21101 TCCCAAACT TATCCACCAG AGCCTGTACT GCTCTGGGAC CTCTCCCCTG  
 21151 AAGTGGTTCC ACCTGATATG GCTGTGTTCT TGTGGGCTCA GTGACACCTA  
 21201 AGCTCTCCTC AGAGGACTTG GGCTGGCAGT GTAGAGGATG TGGGTGCTCA  
 21251 TTATTAGTGG TGGACAAGTT TCAGGGCCAG GGGTGGTGT TAAAGAGGGT  
 21301 GAAGAAAGGG GCTGTTGAGG TTCTGGACAC CCACAGGGCA GCCACATTCA  
 21351 GCACTGTGTC TATCTATGT GGGTGACACT TAGAGACTCC CAGCTTCCTC  
 21401 TGTCGTCTTT CATCTTGCTT AGGGTACTGC AGCATGTGAC ACTACCACCC  
 21451 CGGTGGCCAA AACTGTCTTA TTGGAGGTCT TATTCCTTGC TGTAGAGTTG  
 21501 CACCTTGGTC CAGGTATCCT TCCTGGTCCA ATTGATTGTG GCCAATTGTC  
 21551 TTAGCCCAT TTAGTGTGCT ATAAAGGAAT AGCTGAGTCT GGTAATTTAT  
 21601 AAAGAAAGTA AGTTTATTTG ACTCATGGCT CTGCAGGCTG TACAAGAAGC  
 21651 ATGGCCCCAG AATCTGCTTC TGGTGAGACC TCAGGAAGCT TCCACTCCTG  
 21701 GTAGAAGGTG AAAGGGAATG GGTGTGTGTA GAGATCACAC GGTAAACAGAG  
 21751 CAAGCAAGGT GAGAGTGAGA GGTTCAGGC TCTATTTAAA AGCCAGCTCT  
 21801 CTTGGGAACT AGTAGGGTAG GACTCACTCA TTGCTGCAAG GATGGCACCA  
 21851 AGCCACTCCT AAGGGATCCA ACTCCATGAC TCAGACACCT CCATTAGGCC  
 21901 TCACCCCAA CACTGAGGGT CAAATTTTGG CATTAGGTTT GGCGGGGGAC  
 21951 AAACATCCAA ACCATAGCAC CAGTTGTCCA GTAATTCTTA GGAACAGAAA  
 22001 CACTTTTATG ACCATGCTGA CTAGAACAAA ATTATCTGTG ATTCGTTATC

FIGURE 3, page 7 of 188

22051 CATTCCAGAT GAGAATGGTA TATATAATTT AAATCTGAAT TTATCAAAA  
 22101 TGAAGTGTCT TGTGTTACAA GTAAAGATGA TCATGAACTG CACTGTACAA  
 22151 GAAATTCTTA TCTGATATCT CACCGTGGGA TTATGAGAAA GAAGAAAGAA  
 22201 TCATCACAAA CAGCTTTAAG AATGTGGTGA GCACAATGGT GAGCGGCAAA  
 22251 TGCAGCACAA AGCATATTTA GTTAGCAGCA CAGGCCAAAC CGTGGGTGAC  
 22301 GTGAGAATTT AGCACAGAAA TCGCTGGGT GGAAGGTGGG ATTGGGAAGG  
 22351 ACCTCTTGA GGCAGAGGTA CTTGGAGAGG AAGACCAGGA TCTGGGTGGG  
 22401 CAGAGTATTA GAGTATTTAA GGAGGAGTAA CCCTCAGAGT CTAGGTGTAG  
 22451 GGTGGAATAG GGCCATATCT GTCAGGAGGG GAAAACGGAA CAGATTGGTT  
 22501 AAGGTGGGTA TCTGGGTCTG TGAGCCAGGG GATTATCAG GGACGCTTTG  
 22551 GTGGCCAGGA GCAGAAATCGC CTGCTAACAT GCTCATGTAC AAAGAAGGGT  
 22601 TGTCATGAGG CCCCAGACCT TCTCCCAAAG CCAATGGCAG GATGCCTTCA  
 22651 TGGGCTCAGG CTTAGAGGCA TTGGAAGTCT GTCTCCCAAC TCCCTTCTGA  
 22701 GCCACACTGT CTCCCTTCTC CATTTCTCCC TCCTCTGCTT GTTCTCTCCA  
 22751 GAGACTGGTC TTTCCAGAGA GCTCTGAGTG TAGCCCTTGC TGCAGCTCTG  
 22801 GGCCCCAGAC TGTCTCATTT GAGTTCTGTC TGTATCCTCA GGTCTCAAG  
 22851 GGGCAGAGCC TTATGGCTC AGCTTGGGGA AATATCTTCC CAGATCCATT  
 22901 TGCCTGTGGC CAGGAGGCAG GTCCCACTGG GTGAGGGGCC CTCCAGGGGC  
 22951 TCTGAGGGGA GGATGTGGGT GCAGCGCTGG GTGGCTCTTG TGAAGGAGTG  
 23001 GCAGGAGGTT ATTTGGGGTG GAGGACAGTT GGTGAGGCTG CAGAGCCAGC  
 23051 CTCAAACCTC TCAGCAAGCA CACAGAGAAA CGTGAGCCAA GTTTGTATAA  
 23101 ACATGGGGCA TTTTATGGAG TTGCATTTTT GGATCTTCAG AGCAGGGGTT  
 23151 GGCCCTGGCA GTAAGGCCTG CCTTGTGCTG TTAATCTTT GCTCCCCTGC  
 23201 TTTGTTTGCC TGCCCTTCTC TCCCTGTCTT GTCAGCACCC TCGCCATACC  
 23251 CTACCTCACC AACC CGCCT GTCTGTGGCT GGGCAGCTCA GAAGCCCAAC  
 23301 TTATCCATTC CTAGGATGTC CCTGCAGACA GGCTGTAAAA CAGGCTTGGC  
 23351 CTCCACAGGC CCACTTGCAT TTTGCCAGTC ACTACCCTGG TCCCTCCCTC  
 23401 CATCCTGGTG CCACTGCCCT TGGCTCCTGG GGTACTATGG TTGGAATGTG  
 23451 TTCCCCAAAA AGCATGTGTT GGAAACTTAA TCCCAGTGC CACAAGTTGG  
 23501 GTGATGGTGC CTAATGGGGG TGTTTAGGTA ACGAAGGCTC CATGCTCCAT  
 23551 CCTCAGGAAT GCCGATTACA GAAGGGCTTG AACTGGGAA TTGGATCTCT  
 23601 TGCTCTCTGT CTTTGACCTT TCACCATGGG AGTATGCAGC AAGGAGGCCT  
 23651 TTGCAAAATG CCAGCCCTC AATCTTGGAC TCCCAGACT CCAGAACTGT  
 23701 GAGCCAATAC ATTTCTGTTT ATTATAAAGT ACCCAGTCTC AGGTATTCTG  
 23751 TTATAGCAGC AGAAAATGGA CTAAGGCAGC CTGTGTCCCC GCCTGACCCT  
 23801 TCAAACCTAC TAAAGGGGAG CAGGCTTTGG TGCTCAGTTG TGGCCCTGTG  
 23851 ACTCCAGAGA TACATATCCT GTGGCTGTAG GGAGCTCCTT AGTGCAGCTG  
 23901 CTTTGAGGTT TAGCTGGAAT CATTCTTGGT AAGAAAGAGG GGTTACATGG  
 23951 GAGGGGAGTC ATGGCTTGAC CAGATGCCTC TTCTTAGAAG GTCCACCACC  
 24001 CTGCCAAATC CAGCAAGCAA AATAGTTGAG CTGCTGTGGG ATAATTTGGC  
 24051 CTGTCATCAT GGAAGACAAG ATGAGATAGA TGCACTCCCC ACCTCCCCAG  
 24101 TTCTGAATCT CAGCTTTGCT CCCAGCTAGA TACAAAGTCT TATTGCATTA  
 24151 AAAATTTGTT TTTTGTGTG ATATCTCTTT CTGTGTAGCC AAGAGTTAGA  
 24201 GAGGGCTAGG GAACCAAGGA CATCTCTAGG GTGAGGATGA AAGGGGGCAG  
 24251 TGTCATCTGG AGCTCTGGGC TGAAGTCTG AATGGCTCCT CTTATCCTTC  
 24301 TCTTATAAGA ATAAAGAGGA AGATCATGCC ACTGCACTCT AGCCTGGTGA  
 24351 CAGAGCGACA GAGCAAGACT GTGTCTCAA TNNNNNNNNN NNNNNNNNNN  
 24401 NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN  
 24451 NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN  
 24501 NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN  
 24551 NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN  
 24601 NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN  
 24651 NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN  
 24701 NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN  
 24751 NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN  
 24801 NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN  
 24851 NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN  
 24901 NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN  
 24951 NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN  
 25001 NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN  
 25051 NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN  
 25101 NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN  
 25151 NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN

FIGURE 3, page 8 of 188



25201 NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN  
 25251 NNNNNNNNNN NNNNNNNNNN NNNNNNNNNN CTTAAGGAGG AGGTAAGATT  
 25301 TCCCAGCATT GGCAGCCAAG TTGGTTACTG TGATACCAAC TGTGGTTACT  
 25351 GTGAAGGGCT TTTGGAGGGT CAGGAAACCC AGTGGGAATG TGCTGGTGTG  
 25401 TGCTGACTCT TCCACTGGCC GCTGGAGACA GCAGCAGGGC TGCTGCTGAG  
 25451 ATGAGGCCAG AGGCAAGCTC ATGTACTTCT GCTGGAGGTG CTGCCATGGA  
 25501 GGGACAGCCT CCTCCTTAGA GGTGGAAGTG TCAGGCACCC CCAGGCACAC  
 25551 TGAGTACTAA AGATTGGTTG AGCTGTGGTG GCTCCTTCAG AGTATGCCCC  
 25601 TTTTCATCTAG GTGGATGAGC ACCCCTGCGC TATGGGATGG CCATGGCTAG  
 25651 TGAGTGGTCA GAGCTGCCCA TGAGTGAGGA GAGGAGGGCA TCTCAAAGGG  
 25701 CAGGACAGGG ATAGCCCAGG GACATACAGG GCCCAGGACA GATGAGGTAT  
 25751 CTATACCTGC AGAAGACCAA GTGGAAGGCA TCCTGGCATT CAAGTGGGTT  
 25801 GGAACAAATG AGCCAATGGG CAGCCCCAAA GGCTGAGAGA AAGTCATGGG  
 25851 TAAGAGCCTA GCATGGAAGG AAGAAGAGGT GTGAGGGAGC AGTGTGACA  
 25901 GGGGTTGGCC ATGGCCCATG GGTGACACT GTACCAACAG ATGCCTTTCC  
 25951 CCCAACCTGT GTCTCCAGC TGTTGCCTAC TGACCACAGT AGAACTAGTG  
 26001 GACCCCTCCC CACTCCAGAG TCTCAGAAAC AATGATGAGC ACTTCTTTCA  
 26051 GGCTGGGTGC TATGCTGATT GCTGGGGGCA CAACCAGGAT GCTGTTGTG  
 26101 GGTGGAATTT GGCAAGTGGA CAGCAGCTAC CAGATACTGA GTGCTCTTTG  
 26151 CCCTCCTCTC TCAGCTCTCA CTGCAGTCTC ATAGACACTA CCCTACCTCA  
 26201 TTTTGCAGAT GAGGAACTG AAGCTCCTGG AGGTTAATGC CATGTATATG  
 26251 GTGACCCAGT GCCGGGGGTC TGGGGTGCAG GTGAGCCCCCT TTGTGTCTCG  
 26301 TGCACCTGCA GCGCAGTGGC CCCATTCTCC ATGTCACCGG GAGGCTTCTC  
 26351 AGTCCTGGCT GCTTGAGCCT ACTCTTCCCA CCTGCATCCA GTGAGTTCTG  
 26401 GATACTGAGC TGGCATCGGT CCTCATGGAA GGCGAGTGTG GGCCTGCCCA  
 26451 AGCCATCCTC TGGCTCCACT GACTTGCTGG GAAGAGAAAC TGGCACCCT  
 26501 GTTTACATTA GTTCTGTGTC CTGTGACACC CAGCTGATAC CCTCTGTTAC  
 26551 GAAGGGACAC CCTTCCCCAT ATGTGGGAGT AACAGGGCAC CCTCATTGGA  
 26601 GAACCTGACC AGCCCACTGG CACCTGCAGA GGTGTTGTCTG AGGCAGCTGG  
 26651 GCACCATGGT GCAGAGCACT GGCCAGGCC ACTGGGGCAA GAGTTGTAA  
 26701 GGTGTTAAGA TGCATGATTA ACCCAGTGGT TCCCAAACCT GTCCATACAT  
 26751 TAGAACCCT GGGGTGGCTT CAAAAAATGC TGATGCCTGT GTCCACCCC  
 26801 CAGAGATTGT GATTTAATTG GTTAGGGTA TGGCCTATAC TCTGGATTAT  
 26851 TTAATGTCC CCATTTGAGA ACTGCTGGGT TAGCCTATGA GAGAAGTGTG  
 26901 GGCAAAATGC CACTTCTGT CCTCATTGTC TTTCTCAGCA CCTACTCCTC  
 26951 AAGGGAATA ACTGATTAG GCTGCAGGGG ACAAAGCTTC CCTGTGCCTT  
 27001 TGCCAGGCA CAAGCCCCCT CTGGGAGGT GTGGTGGCT AAGGCTGGCG  
 27051 TGATTCTGA TGTGGCACGT GTGGGCAGG TATTTCTCTA CTTGAGGAGT  
 27101 GACATTGCAT GCCGTCTGCA TGCTCCCTCA TTCCTTTCTC ACGACAATCT  
 27151 TATAGGTAGC ACCTTTCAAT CTCCTCTTCA GACGAGGAAA CTGAAGTTCA  
 27201 TGGTGCATCC TACGTGAGGA ACAGAAAGAG GACAGGGAAT AAAACTGGAT  
 27251 TTTCTTGGG ATTCTCAGAT GGGCCAGGTC CTAAGTAAAC ACCAATCTAG  
 27301 CTCTGCTGAC CACTGGGGC CTTTCTTCTT TTTGACTCTG TTGTAAAAGA  
 27351 AAATTGAAAA ACGGTCTTAT TGTGCCTTAA AGCCTTTTAA ATTAATATA  
 27401 ACTCATTTAA TTTAACTAC TTTAAGTTCC ATTTTAAATA TAAGTGTAT  
 27451 AGTGGTACAA TGAAAGTGCC TTCTAATCAA AGTGTGTATG GGGATTTACC  
 27501 TCCCTGTACA AAAAGCCTGT GGGAGCCCAA ACCAATGATT TATTCAGACA  
 27551 GCAATCCAAA ATCACCAGAC CCTGAGTGAG GCACACATGG TGGAGGTTCA  
 27601 TGAGTGTGGG TAGGAGTCGG AAGTTCCTCT GGGGGCTGTG CAGATTGAAG  
 27651 GAGGCGGGTG TGGAGAGGGC TTAGCATGGA GCCTGGCGTG GGTAATTGCT  
 27701 TAGTAAATGG AAGCTGCTAC TGGGATGCTA CTGCCATCCC TAGGACCTCC  
 27751 GCTGCTTCCC CTGCTAGTTC TTAAGTCTGG TGCCACAGCT ACAAAGTAGG  
 27801 GAGATGACAG TGAAGAGAGA GGCTCCCTG GTGGGCAGGA GGGATTGAAC  
 27851 AGTCCTGAGC AGACAAATGT GCTCAGATTG GGTATGAAG TAGAGACCTA  
 27901 CTCCAGTACC AGCCCCCAGG AGGGGCACGG CCTGACCGCC TGATGTCACA  
 27951 CAGCAATCC TTTCCCTGT GGCAGTCTAT CCCCTTCTCT TGTTCATTT  
 28001 TGCACCGTGG CACTTCTTAG CATGAGGTAT TCTCTACATT TCCTTTGTTT  
 28051 GTGTGTTTGT TTGTTGCCCG TTTCTTCCAG TGAGATCCTA AGCTTCATAA  
 28101 GGAAGTGGG TGGGGCTGCC TTGGCACTGC TACATCTCCA GGACAATAAA  
 28151 TATCTACTGA ATGAGTGAAC ACATGAACAA ACGAAGGGAT GATGAAATGA  
 28201 ATTGCTCAGG AGGCCCGTCA AGAGCTCTGC TGAGAGACCT GGGTGATGGG  
 28251 GCTGAGGGTC TTGGGGAGGG TCAAGGAGGT GGGAAATTGA AGCTAGGACC  
 28301 TGATGGGAAG GCATCCACAA AGCTGAGCCA CAGAGGCTGT GAGGGATGGG

FIGURE 3, page 9 of 188

28351 AGTGGAAAGTG AAGAGGGGCC AGAGGAGATG CTCAGGAGGA CAGAGGGAAC  
 28401 ACTAGCTAGC AGGAAGATCC AAGGGGAGGG GACCTATTGC TGTGTCAGAT  
 28451 GACAGTTTCT GGTGGGAAGT CTTGGATTAA GGGATCTTCA AGTGTCCCTT  
 28501 TGGAGAAGAG GGTGTGCCTG ACCTTAAGCA CTGGCCACTT TGGGTGTTTT  
 28551 CAGCTTATCC CAATCAGACG CCACTTGAC CAGTCCTGC CCCCAGCCGG  
 28601 CCCTTTCCCA GCTTGCTCAC CTTCTCAGAG GCTCCAGCCT GATCAATCAC  
 28651 CGCTGGCCCC ACCATGACTC TGGCACATTT TGCATCTTTA TGTGAGACCG  
 28701 TCTGTATCTG TGA CTCCCTA ATTCTGTGCA AAACAAAGAA TGAAAAATAG  
 28751 ACTCAGACAT GAGGACTGTA CTGGAGGGCA CACTTCTTTC CTTTTTTGTC  
 28801 TTTTAATTTT CTAGGCACAG GTTATTCTAA ACCTCATCTT GGGCTTGCAG  
 28851 TTGGCAGAAA GAAAAGTAGC AGATTGGAAT ATCATGTAA ACAGGTGGAT  
 28901 GTTAAGTTGT ATCATTTATT GGATGGTTCC TGGAGGGTGT AATAAATAAT  
 28951 TTAAACATGA ACTCCTTCCC CTTTCTCTCT CAAGAGCCAC TTGTCCTTGC  
 29001 TGTCTCTCTCT CCTCCCCCAG ACACCTACAA GACTGTCATG ATTTCTTTAT  
 29051 GGATCATGGA CTGCTGGAAT GAAGTCAGTG CAGGAAAGAA GCTTGTTCGA  
 29101 TCGACAGATG TAGACATGA AGCGTCTCAG AATGAGGAAC GCATCACAGG  
 29151 CTGTCCCTGT GTTTCTGTAG AAACCTTACC TACAAAAGGA AAAATAGAGC  
 29201 ACGTCAGGCT TCAGTGACAG TCAGTATGTT CCGTGAGCCA GCTGGGAAAC  
 29251 TGCACCTACC TCCATATTCT TACCAGGAGA TCTTGGGATA ATCTGATTTC  
 29301 ATTCAGCAA TAGAATGTGT TTAGGGCCTA CGTACGCCA GCGCTGTGTC  
 29351 TGCAGTAAGA CATGAAGGAG ACGTGGACCC TGGGGGAGAT GGACACCCCT  
 29401 CTTGTAGTTA AAGTCCAGTA TGACCATTGC TTTTGGGGTT AAGCAGCTCT  
 29451 GCAGATAATG CCTGTGTTAG GCTGAGCCCT GCTAGTGTCA GTGGAATAG  
 29501 CAATGACATG TTAATGAGGT TGTCTCTCAG GGTGCTGAGT TAGAGCCCCA  
 29551 TGCTGCTAAC GTTGTGATG GTCTTGACG TGGTGATTGC TCATTCTGAG  
 29601 AGATGTGGAT TACTTTCCAA ATCAAAAAGT TAATTAGTTT TTAATTTGTT  
 29651 GGGTTGTCTG AGAGATACAA CTGGAATAAT CCCCTCTTGC CTTCTTGGTC  
 29701 CCTTAATCTG GCTGTGTGCA GGCGATTATG TTTAACAAGG AGCAGTGATC  
 29751 AATCAGTTAT TGACATTTAT TTCATCAAAT GTAACGAAT GTTTACTCAT  
 29801 ATTGGTGGAT TTGCTACCAA AGACTGTCTT AAATTCAGGG CTAACTTTTT  
 29851 TTTTAAATTT GTAAATGAAT AACCTTTAGC ATAAAGCTTT AAATGATATC  
 29901 TAGAATTTAA AATCACTAAA TCCTCATATA ATATTTCCAA ATCATCTTAA  
 29951 TTTCTGAAGA TGGGCACCTA TCCTTTTGCT TTCTTTTCTG TCTAGTGTCT  
 30001 GGTAATCACC ATTAATTCCA TTTCTTTTTT GAGTATCACA GCTTTCTCCT  
 30051 TCACTGACCA CCCTTTGCTT CCTGTCAGAA AGCCCTGGAC AGAACTCTCT  
 30101 GTGGGACTCT GCCCATGTTT CTGAGATATC GCCTCAATTG TCCTGGCTGG  
 30151 GCTGTCGGGT TCGCCCGTTT TACAGATGGG CAAACTGGAG TGGGAAGTAT  
 30201 CCGGGTGGCT TCCTCAGGCC TGCAGCTGGT GGAGCAGCTA CTGAAACAT  
 30251 CAGGTGATTC AGATCTACTG GAGGCTTTGC CCTCATGGGC ATAATAAAGT  
 30301 TGGTATTCCC AGGTCTGCCC ACAAGAAGCT ATTGATGGGT TTATCATGTT  
 30351 GATTCTTTTT TAAATTAGTA AAGTAAAAGA GTACCTTAAT AGTAAAGACA  
 30401 TTTCTTGGT ATTTTAAAA AGTCATGTGA CATGATCTCT TCCTTTTGTC  
 30451 TTGATAAACC TCCCTTTAAA CTCTCTGGCT TAGTTATTTT AGACTTCCCA  
 30501 GCCTCATGTA ATACTGGTTT CTTTACATTG ATCCATTAT TGTCAATTAT  
 30551 TGTAAGATAG GCAATAGAGG GGACATCGAG CTTGCTTGCT GTGCTATCTC  
 30601 TGTTTCAGCC CCAAAGTGCT GGAGACTTGC ACTGTTTTGT TTGTTTGTTT  
 30651 GTTTGTTTTG AGACAGAGTC TTACGCTATC ACCCAGGTG GAGTGCAGTG  
 30701 GCGCTCCATT GCAGCCTCTA CCTCCCTGGG CTCAGGTGAT CCTCCCACCT  
 30751 CAGCCTCACA AGTATCTGGG ACTACAGGTA GGCACCACCA TGCCCAGCTA  
 30801 ATTTTCATAT TTTTGTGTAG AGAGGGGGGT TTCACTATGT TGCCCAGGCT  
 30851 GGTCTCGAAC TCGTGGGCTC AAAGGAGACT TGCACATTCT TTGCCTATAT  
 30901 GGCCATGCCC AGCCCTCTCC CTTTACATC TGGTCTTCTG GGAAGATGAG  
 30951 AAAGGCAAGC TCAGCCTCTG CTGATTGGGC AACTCCTAGG CAGGGCTGGC  
 31001 TGAAAGGTGC AGGGACCCCT GGCCTTTATC AAACCTCCCTC AGCTATCTAA  
 31051 GCCCTAAAAG GTTTAGTGTT GGCAGCTGTG CCTCCCCAC CTTTGACTGT  
 31101 TCTTTAAGGC AGTAAGCCCA TCTACCAGGG CTACACACAC CTCTCTCTAA  
 31151 CCCCAGAGCC ATCTGACACT GTTCTCTGTG GTGCAGGAGG GGAACACTGA  
 31201 CCCCTCGATT AAGTGGCATT TCTCAAGAGC CAGCACCCCT TCGGTGTTTT  
 31251 TCATGAGCAC TTGCAGCAAG CTCTGCATAA CTGGAGGAAG CAGGGGGTGT  
 31301 TTAGACCCCTC CCCCAGAATA TCCTGTCTT TGCTGGATTA TTCAGCTTGG  
 31351 CTTTCAAAC AGCCCCGGGT TTAGGGTTAA TTCTCTCACC TTCTCTGGCT  
 31401 TTGAAGACCC AGACATGGTG TGCTGAGAAA TCCAACAAC CAATAGTTTT  
 31451 CCTTCTGCCT TTAACCTCAG CATATAAATG AGATAAAGTG TGCAAAACTC

31501 TTACTGTGTG CACAGTAAGT GGGAGCCAGC AGTGAATAC ATGCTACATA  
 31551 AGGCGCCACT TTATTTAGCT GTATTTTGTC AGTCCAAGTG AAGATTTTAA  
 31601 TTGCAGAATA GTGTCTTGCT AGCAAAAATG AACCTGCTTA GAGTCAAGTT  
 31651 TTTAAATTC AAGTGAATAA ATGAAAAATT GTAAGAAAGA TTGTTAAAGA  
 31701 AGCATTTCATT TTAAGAACAT CTCAGATATG AAAAAGCTTAG AACTTAGATG  
 31751 TCAGAATTTT AGTAGCGATG AATCCCATGG CAAAGCTTCC ATCTCATCTG  
 31801 TACTAATTGG TTCATAAATT GGACACGTGG GCTTCCTTTT GTGTGTCTTC  
 31851 AGGAAGTTGA GGCCTGAGGA ACTCTGAAGC CAGGAGCTTC CTCAGCCCCT  
 31901 CTGCTGTGCG ATGGAGGTGC TGCCAGTCAG GGGCCCCTCT TCAGGACACT  
 31951 GGCACAGGGA CCTCCTCAGG CCGGGCCCCT TGTACAGCGG ACTCCTTTCT  
 32001 GCTTTGTCTA TGAAGATCTG GCCACGTTGA GCTCCACTCC ATTCTGCTTT  
 32051 GTCTACGAAG ATCTGGTCAC ATGGAGCTCC ACTCCATTTA CTTTTTCGTT  
 32101 GCATTCTCTT CTCAGTGTGG TTGCTTTTGA TCCCCACTT TCGTAACCCA  
 32151 CATAGCCAAT ATTTTCCCAG TGAATCCCAT AATATTCTGG GTGACAGACT  
 32201 GAGGCTTACT CCCTAACCAA AGACCTCTGA GAGCACAGAT GGAGAGGCGT  
 32251 GACTATGATC TGGGGCAGGG CCTCACCATC CTTTCCAGA GCCTCACCCC  
 32301 CTGTGCCCAA GATGGACATG GGATGGACCT AGGGGTAGAA TTTGAGAGTG  
 32351 CTCATTTATA CTCTTTCAGC AGCCTTCAAA CTGTTTTTTG GTAGCTGAGA  
 32401 ATCTGTAATC GGCTTTTGGA TTATGAAAAA TATTGCTCAG CACTCATATT  
 32451 ATATTGATTC AAAAATAAGG ATTGTGTAGT TTAAGTGCAT AGTAAAATAC  
 32501 AGCTTTATAG AATGGTAATT TTTATTTTAA GTTCTTCTAC ATTATAGTGA  
 32551 GAGATAACGG ATTCAGGAAG GGCACAATGA GGAATAAAGC TGTGTATTG  
 32601 TATTGTTTAA ATGACATTTT AAATGATTTG GCTGTCAAAC TCGTAGAAAG  
 32651 GTTATGAGCA GTGAATGAAA AATCTAAAAA TAATTCCCTG CTCAAGAAA  
 32701 GTGTGATTTA TACTATAATA AAATTAGATT TTTAGTTAAA GAAATTTAGT  
 32751 CATTAAAGTAA TGCCCATGCA CTAAGTCTCA TTTATAACCA TCTGGTTTGA  
 32801 AGCTTCTGCA GAAAATAATT TCTTCTTAG ACAATGCATC CAGGGCCTTG  
 32851 GTGTCATTAT GTCAATGAAT TTCACTCCTT ACATTTCTGC TACAGCTTTT  
 32901 GAGGGGTTGC TTTTAAAGC ACTGGAAAGA TGGATTCTTA TTTAGCCTCA  
 32951 ATAATTGAGG AAGCCGTTGA ACTCATTTAC CTCCCAAAAA TAATCTGATC  
 33001 GTCTCCCTCT CTTAGCTCTT TTCATGAATG GTAATGTTGT TGATGATGGT  
 33051 GGCACATGTT GGAGGACTGC CTGTGTGCTG GACACCATGC TAAGCATGGG  
 33101 ACAAGCTTAT TATTATTTCA TTTGATCATC ACAACTACTC TATGTGGAAT  
 33151 GTGCTATTTT TGCCTTTACA GATCAACAAA CAGAGACTAA GGAAATGTTA  
 33201 AATAATTCAA CAAAGGTGAC AGAGGCACAG CTGGCCCCCA CTCTTAATCC  
 33251 CTGTCATATT TTTACGAAT GTGTGTTGAG CATTTCCTTG GAGGAAGTAG  
 33301 AGTATAGTGG TAGGACCTCA GAGGTTTGAG TCTAGTCCTG ATGTGGCCAC  
 33351 TTCTCATGTG AAATTCAGCA AGTTGCAGTC TTTCCCTCAG TACATCTTTC  
 33401 TTCATCTGTA AATTAAGAGT GGGGTTTGTT CCCTCTATTT AACAACTTC  
 33451 TGATTACTCC TGGGTAATTT GTCTTATTTT AAAAATTTTT ACTGGAGCAT  
 33501 ATCAAATATA TAGTAAAGAC ACATATTCTG AGTGTAGCAC TTGGTTAATA  
 33551 TTTGTAAAGT GAACATATCT ATGTGACCAC CACCAAGATG ATAATATAGA  
 33601 ACATTTCAG CAATCCACAA ACCATTCTGT GTCCCCCGT CATTATCCTC  
 33651 GCAAAGGTTA CTACTCATCT GTCATCAGAG ATTGGTTTTC CTTGTTTCTG  
 33701 AGATTTATAA AAATAAAATC TTATAAACTG TACTATTTGT TTCTGCTTTC  
 33751 TTTCCCTCAG CGCTATGACA ATGAGATTCA GCTACATTAT CACATGTTGC  
 33801 AGAGTTTTTT CTTTTGCACT GCAGTGAAGT TTTCCATTGT ATGGATATGC  
 33851 CACAGTTTAT CTGTTCCACC ATTGGTGGAC ATTTGCATTA CATATCATGC  
 33901 TGCAATTCAGC CTTCTTATAC ATGCATTTG GTGCTCACAT GAATGTACTT  
 33951 CTGTTGGACA TTTACTTAGG AGTTAAATTG TTGGGTCAGG AACATAGATG  
 34001 TCACAATAGT TATTTTAAAC TAATTTAATT ACAGGAAATT GGTAAACAG  
 34051 ATATTAAAGG ATTAAGAAGG TGGAAAAGGA AACACTGCAA TAGTTAAGAG  
 34101 CAGTACCTGC AGGAAGGAAT ACCTTTATCA CTACTGTCTC CAGGGGAGGA  
 34151 GCCTCTCCAT ACTGGGACTC AGACCAATGA GGAAAGTTTT GCTGGTGCTG  
 34201 GTTCTCTGA GGGTATAAAA ATTATAGTTC CTTCATATCC TTGTAAACAT  
 34251 TTACTATTAA CAGTTTTTTA ATGTACATTA TTATATGTGG TTTATAGCAG  
 34301 TATCCCACTG TGGTTTCAAC TTGTGAAGTG CCTATTCAAA TGTTTTACTC  
 34351 ATTCTTCAAT TAGGTTATTT GTATTTTCTT TATTGATTG CAAAAGTATT  
 34401 TTATATATTC TCAATAAGTC ATTCGTAAGA TATATGGATT GCAAATATAT  
 34451 TTCCTTAATG GCTTCCCTTT TCATTGTCTT GATCCTATCT TTTAATAAAC  
 34501 AGAAGTCCTA ATTTTAATAA AGTCTGAGAT ATTCTTTTGG TTTGCTTTTC  
 34551 ACATCCTCTT TAAGAAATTT TCACCTATGT ATTTAAAGTC ATGAAGATAC  
 34601 TCTTGATATC TTATAGAGAC TTAGTTGCAT TACTTTTCAC ATGTAGTTCT

FIGURE 3, page 11 of 188

34651 ACAATCCATC AGGAAATGAT TTTTATGTAT GTTCTAAGAT ACGTCCAACA  
34701 TTTTTTCCAT GAGGTTGCCA TGATGTGTTT AAACCTTGCTT ATGGCTCAGC  
34751 ATACGGCCAA TTTTATAAAA TCTCGAATGG, ACACCTGAAA TGAAGTGCTA  
34801 TTTGGTACAG TGTTTGATGT CTGTCAATTA GGTCAAGTTT TAAAATTATA  
34851 GTGTTCAACT CTTCTATATC CTTACTGATG CTTTTTTCCT CTACTTGTTT  
34901 TATCAGTTAA AGACAGAGAT TTTTAAATTT TTCCAACCAT TATTGTGGGT  
34951 TAAAAAAATT CTCCTCTTAG TTCTTTGAGT TCTGGCTTG CATATATTTA  
35001 GACTATGCTA CTAGGTATGT ACAAGTTTAG AATTGCTATA TATTTCTGTT  
35051 AAGTTGTTC TTTTCTAATT ATGAACCATC CCTTTTTATC ACTGATAATA  
35101 ATTCTTGCCCT ACTTTATCTA TAGCCATGTT TTCTTGTTG AAGTTAATAT  
35151 GGTTTATCAT TTAAATCTTT TACATTCAGC CTTTTTGTA ACATATATTT  
35201 ATGATATGTC TCTGTAGGC AGCATATAGT TGGATATTGT TTTCTCTATT  
35251 ATGCCAATCC TTGTGTGTTT TATTTTTTAT TTATTTTTTT TGTTTTGTTT  
35301 TGTTTTTGTT TTTTTTGAGA CAGAGCCTTA CTCTGTCTCC CAGGCTGGAG  
35351 TGCAGTGGCG CAATCTGGGC TTAACAAG CTCTGCCTCC CGGGTTCACG  
35401 CCATTCTTCT CCCTCAGCCT CCAAGTAGC TAGGACTGCA GGTGCCACC  
35451 ACCATGCCTG TCTAATTTT TGTATTTT TAAGAGATAG GGTACTGCTG  
35501 TGTTAGCCAG GATGGTCTCG ATCTCCTGAC CTCGTGATCC ACCTGCCTCA  
35551 GCCTCCCAA GTGCTGGGA TTACATGCAT GAGTCACCTC GCCCAGCCCA  
35601 ATCCTTGTTG TTTAATGGGA TTATTAGCC AATTTATAGT TAAATAGGTT  
35651 TAAATATAAA CCCATGTTTT CTCTGTCTA TATTCCTTT CTCTCTGCC  
35701 TTTCATGTCT TCTTTGGAT GAGACAGTTT TGTTACTTC ATTCCTTTGG  
35751 TGTCATAGCA CTAATTTGCG CATTTTGGG ACAGTACTAG GACATTATAA  
35801 CACTTTAATC TCATTTGACC TCCTGATCTT TTTTAAAAA ATCATATTAC  
35851 TATGTATTTT AGTTCTACAA ATATTTTAT CTTACAGTGC ATTATTGTTG  
35901 TGTTAAGTAG CCGAAATGTA TTTTATGGT TTTTAAATG CTTTTGGTG  
35951 CTCATTATTT CTTCTGTCAT AGCTATACAT TCATCTGAAT AATTTCTGC  
36001 GTTTTTGCCT TAAAGTTTCG CTATAAAGTA TTGCTCTTAG TGTTAATTTG  
36051 TTGGCAATGT ATTCTCTCAG GGTTTTTTT TCTAAATATC TGTATTTTAC  
36101 CTTCAATTTAT TTTACCTTAT GAATACCAT ATTTTCATTG GATTCTAATG  
36151 TTTTTTCAA ATTTTAAAGA TGGTGGGTAC TATGCTTATT ACCTGGGTGA  
36201 GCTTTACACC AAATCCCCAA GACATGCAGT TTACCTGTAT AGCAAATGTG  
36251 CACATATACC CCTGAACCTC AAATAAAAGT TAAAAAATT AAAAATAAA  
36301 GATGGCATT CATTGTCTTC TGTTCCATT ATTTCTACT GAAAAATCAG  
36351 CTATCCCACT TACTGTTGCT CCCTTATAGG CAATGTTCTC CCCATCTCTA  
36401 CCACCCACC TTTGGCTGTT TTAAAGATT TCTATTTGTC TTTGAATATT  
36451 CAACTATTTT ACTGAGTACT TAGGTATGGT TGTGTTTGA TTTATCTTGC  
36501 TTGGGGCTTG TGGAGATTCC CAAATTTCTG GCTTGATGTC TTTCATTAGT  
36551 TTTGAAAAG TATCAACAAG CGTCTCTTC AGTATTGATT CTGCCATTT  
36601 TCTCTGAATT TTCATCTCTA AAATTTAATT ACATGCTTGT TAGAACTCTT  
36651 CATGATGTTA CAGTGTCTCA TACTTTTTCT GTATTTTTCA TTCTTTATCT  
36701 TTTTCTCTT CAGATCTTCT GTGTGGTTAA TTTTACTGA TCTAGCTTCC  
36751 ATCTTACTAT TCCTTTCTTC AGTTGTGTTT AATCTGTTGT TAAATCCACC  
36801 TATTGAATTT TTCAGTTATT TCATTTTCAG TTATGAAATT TTTGTTTGAT  
36851 TATTTTTTGT TTATTTTTGT TTCAATAGGT TTTTGGAGAA CAGGTGGTGT  
36901 TTGGTTACAG GTTTTTAGTG GTGATTTTCG AGATTTTGGT GCATCCATCA  
36951 CCTGAGCATT TTACAGTGTA CCAATGTGT AGTCTTTTAT TCGATTCTAG  
37001 TTTTATAATG AAATTCAGCA TCTTTCTCTC TATTTCTCTA AACATATTAG  
37051 CCATAGTTAT TTTAAAGCTT GTGCCTAAGA ATTCTAAGAT CTGGATAACA  
37101 TGTGGCTCTG TTTCTGTGGT CTGTTTTCTT GGATTTTAGC CATTCTGATC  
37151 CATTTTCATG TATGCCTGGT AATTTTAGAC TGGATGCTGG AGATTATATA  
37201 TGAAAAATTG TAAAGCCTGT GGATCACTT ATAGATTTC ACAGAGGATT  
37251 TATTTTTCTT TGTTAGACAG ATAGAGTCCT GGAATATCAT CTTTATCTAC  
37301 TCAAGAATAG GAATAATTTG AGAATATATG GTCTTAGCAG TAAGTCTGCT  
37351 GCATTTGTCA GGGCGACTAT TTCTTGGA GCCTAATTTT TGTCTCTTTA  
37401 GTACCATGTA CTTTCAAAAT CTATACTTAG ATTTTATTAT TTGAGGCTTT  
37451 TTTTTTCTT GTTCAAGGCT ACTTTTAAAC TTGTTTCTCA GCCTTTGCC  
37501 CTTTATGTGT GTAGCTCAGG CATAATCATA TAACTCAAGG GGAAGCCGAA  
37551 AATGTTGAGC TCATTTCTTT CTGGTTTCCT TTTCCAGGGT TTCTGACCTT  
37601 CAATTTCTGG CTTCTTTGGT AGCCTTGCAC TCTGATGTTT ATTTCCCATC  
37651 TCAGAGAGAC TTCTCTAAGT TCTAGAATAT TATATTCTGT TTGGCTTCTA  
37701 TGCAAAACAG CAAATGTCGC AAAGGGGAAA TGTGGCAGTG AATATGGGGC  
37751 TCATCTCAAT GGACTTTTCT CTCATAACTT TCCTTTAAAT TCTGGCTGCT

37801 TTTGTTGCTG TTGGATGCCT TCAAAAACCT TTTTAAATT CCACTTTTAT  
 37851 AATTGTTGAT AGCAGAAGGA TTAGTCTCAT ACAAGCTACT TTTTATGGC  
 37901 ACAAAGAAGA AGTTTATCTC ATAAAATTTT CACAATGTCC CTAGGAATTA  
 37951 ACTATCATGA CTATTTTAA AGTTGGAATG CTGTGTGCAT AGGCATTGGA  
 38001 ATCAGACTTT GGGATTTAAA TCTTAGCTGG CCACCGACCA AAATATGAGA  
 38051 CCTTGGACAA GTTTAACCTC TCCTCCCTTT CAGTCAGTCT CTGAGAAATG  
 38101 AAGTGGAGA ACTGGGAGGC TAAGGCAGGA GAATCACTTG ACCTGGGAGG  
 38151 CAGAGGTTGC AGTGAGTCGA GATCGTGCCA CTGCACTCCA GCCGGGGCCA  
 38201 CAGTGTGAGA CTCTGTCTCA AGAATAAAAA AATTTTAAAA TAAGATAATC  
 38251 CTATTTTAT TTAATTTATT TCAGAGTATA ATAAAAGGAA AACTTCCAAA  
 38301 TTCATTACAT AAAGTTGGTT TCATTTTAAT TTCTTGTTTT TTGTTTTTTT  
 38351 TTTGAGACGG AGTCTCGCTG TCTCCAGGC TGGAGTGCAG TGGCGCGATC  
 38401 TCGGCTCACT GCAAGCTCCA CCTCCGGGT TCAGTCCATT CTCCAGCCTC  
 38451 AGACTCCCGA GTAGCTGGGA CTACAGGCGC CCACCACCAC GCCCGGCTAA  
 38501 TTTTTGTAT TTTTAGTAGA GATGGGGTTT CACCGTGTTA GCCAGGATGG  
 38551 TCTCAATCTC CTGACCTCAT GATCCGCCCC CCTCAGCCTC CCAAAGTGCT  
 38601 GGGATTACAG GTGAGAGCCA CCGCGCCCGG GCAATTTCTA AATCTGATAA  
 38651 GAAAAATATG AGATTGGTAG ACCAATCTCA TTTATGAATA TCAGTACAAA  
 38701 AAATTATAGA CCAATAAATG TAAAACATAT TTAATAAAT AAACAGAATC  
 38751 CAGCAGCATA TTTTAAAAAG TATATTATGA CTAAGAAAAG CTGTTTTTAG  
 38801 AAATACAGGG GTAGTGGAAT ATTATGAGAT CTAATATGTA AGTCATCCTA  
 38851 TTAATAGAAC TAAGGAGAAA AATCATATGA TTATCTCCTT AAATGCCAGA  
 38901 GAAAAAGTACT TGATAAAATC CAACACATTT ATTTTATTTT ATTTTATTTT  
 38951 CAACAAATAT GTATTGAGCA TCTGTTCTGC TACAGCACTG ATGATGCAAG  
 39001 AGTGAAAAAG ATACTGGGCG CATCCCAACC CACATTCCAC TAGAGGGAAA  
 39051 CAGTCAATAA ACAAATGAGT AAAGGAACAA GCTGTTTTTC AACTAGCACA  
 39101 TACATTTATT TTTAAACTC AGTAAAATGT ATATTGGTTT CATTAAATATA  
 39151 ATAAACATAT CTCAGGCTAA AAGCCAGCCT GTCACCTAAT GGGGAAATGC  
 39201 TAAAGGTTTT CTCTGAAAG CAAAAGCCAA GACAAGGGTG CCCAGTATGA  
 39251 ACACAACGCC TAACATGGGT TGAGAATTGG TTAAGCTCTT AAGGCAAGAG  
 39301 AAAACACCTG GAAGTATAGG AATTGGAAAG AAGAGATAAG ATAATTGCTG  
 39351 TTTGCAAAAT ACATAAATAC TCAAATGGAA ACCCCAAAAG AATCAATGGA  
 39401 AAACCTATTA CAAACAGTAA AATTTAACCA AGAAGCTGGT TATAAAATAA  
 39451 ATATAAAAAA TATTTTTTAA TTGCCATCAA ATATACAAAC AAAAATCAGC  
 39501 TGGAAGAAAT AATAAGAGAA CATCCCATT ATGATAACAA AAGACATACA  
 39551 AAAAAAGAAAT ATTCAAATA CGCACAAGGA AAATAATAA ATACTCTTGA  
 39601 AAGAAGCAAA AGTAGACTCA AACAATTATT AAAATCCTGT GTTATTAGAT  
 39651 AAGAACATGC AACATTATAT AGATGTCAGC TTTCCCTAAA TTAATTTATA  
 39701 AATTTTATGT AACCACAACA AAAATTTTAT AGTTTTTTTC TGGAGCTGAT  
 39751 TATGAATATC TCCTGTTCCA TGAATACTAG TTGTTTCAAG AAACAGAGGT  
 39801 GCCAGGCCCT GGAGCAGGTT ACTGAGGAAC AGTTTGGGAG GAGCTGGGTT  
 39851 TGTTTTGTGC AAAATACGCT CTGTGGCTTA TGTTTCTGCT ATTTAACCTG  
 39901 TCATCTCTAT GCCGCCTCCT CTGAACCTT ACCTGATGAG TACTCCTTCA  
 39951 GGAACCAGAG TTTGGTTTGT GTGATGGGCT GTTGGCATGT GACATGGATC  
 40001 TTCCACTGAT CTCCACCAGG GCTTTTTGCT CAGTAGAAAG GTAGCAGTCA  
 40051 GGGAATGTAA TTTGGGTAGG ACAACCTTCC CAGTGCCCTC TTAGTTTCAT  
 40101 CTCTAATATT GCCTCCCCCT TCTGACAAGA GGATGCTAGA CAAGAATGCT  
 40151 AAGGTGTGAA AGACAATGCT ATTACCTTAA AAAGCACTGT TGCTGAATTA  
 40201 CCTTCTTGGC TGCGGTGTTG AGGTGGTAGT CCCAGTTTGG TGTTTTCTCT  
 40251 TCTCTTCTTT AGTTGCTAGT ATGGACTTTC AGCTTATTTT TAACCTTAGG  
 40301 CTTTTTATCC AAAACATGTC GTTTATGATG AATTGGAGAT ACTTTATATT  
 40351 AGTTATGAAA CTGCAATATG CATTTCTAGT CTTTCCCCC ATTAGTTCTC  
 40401 ACCAGACTT TTCATTCTTC TAGAGCTACC CTGAATTTTC ATACCACCCA  
 40451 ACATTTTCTT ATGCTATTCT CTCTTCTGCT TCCACCCTCC CTCCCCCATT  
 40501 TTTGCTGAA AATCTGCCTG TTCTTCAGTG CTATTTTCAA AGGTTCTTTT  
 40551 AAAAAACACTT TTCTTATGT TTCCAAGTGG AATGTGAAAT GCTGGTATTT  
 40601 ACAAGACAAA TCACCCTTTC ATTTCTCAGT AATTGTGTTT GTTCTGTGG  
 40651 CCCCTAATC AACTGTGAAT ATCAATGCAG GTACTCAGTT TTACCTGGGT  
 40701 AACTTCTGAA AACTTTGCT TATTGCCCTG CGCATAGTAA GCATCAATAA  
 40751 AGATAGGATT GAATTAAGAA AACCAGAGG CTTAATTTAG TCCAGTGGCA  
 40801 TGAAGTGGCT ATCCAAATTG TTCATAGGAT CTCACCCTTT GGAAACTATA  
 40851 AATTGTGTTT AATCTATTAT CAGGTGATGT CAGTGACATA TCCAGTAGCA  
 40901 GTGGTGGTCT TCACCATAGC ACCACAAAAC AGAACCTGCT GCTGGCCAGA

FIGURE 3, page 13 of 188

40951 TAATTTTAGC CCATCTGCTT ATGTTTCTT CAGTCCCTAA AAGCACCTAC  
 41001 AGTTTCAGGCA GAGGGTGGGT CATCAACCTG GAAGAGGGTC TTCCCTAACA  
 41051 CTTGGTACCA GCCCTACTC CAAATAAGGA AGGCCCTGAC AATGAGCTGT  
 41101 GCTCATTAAA AACTTTGTGA TTAACAGGAT TTTTGTGCC TAAGCCCTCA  
 41151 AAGCAACAAG TTGTTTACAT TTATAGATGT ACATGTTGAG AGTTTAGTAG  
 41201 ACCAACATTG CTCAGTGTCA TGTCTTCGT AGATTGTTCA CCTTTTCATA  
 41251 AATGTGTGAC TAACAAGAGA GGAGATATTT GCAAGTATCT GTACATATGA  
 41301 ATTATCTCTC AGAAAAACACA AAGTCTTTCT TTTCTTGCAG GAGCCCAGAA  
 41351 GCTTTGAAGT CACAAGAAGA GAAGGTAGGA AAAATGCACT CATACCCATT  
 41401 TTATTTTCAG TGTGACATT TTTGAAGTAG TTTGCTGAAA CTAAGATGAA  
 41451 CTTCAGACTG TGGGCAGCTC ATTCTTTGAA ATTTCATGCG GCCTTTTCTG  
 41501 GGTGCTGACT GCTTAGCACT TGTCTGTAGG GACTGCATGG ACTGAAGGCC  
 41551 AGGTTTGCTT GTGAAAACATA TGACTTCTAC CTTCAAGTAC CAGAGGTGGG  
 41601 ATACTTGAAG AACTGGCTCA TTCGCAATCA TGTTTTGGT CTCTTAAGAG  
 41651 AAGCCTCATT CTGAGTGAA GTTTGGAATA ATTATTAGTT TTACCCAGCA  
 41701 AAGCAACGTG AACAAACACAA AAAATGGCCT ATGGTTTGTG GTATTTCAAT  
 41751 ATCTGGGAAG AGATGCCACT GTGAAAAATA TTTCTGAATA GATTTCTTAC  
 41801 AGCTTCAGCT AAGCTGAAAT AGAAATAACT AATTAATTTT CCTTTTGAAA  
 41851 ACAGTTCCAT GATGTTCTGT TTCCCTGCC AGAGTTCCTG TAGCACATTT  
 41901 GTTTTATGGT CTCTGAGGTA AACATATATG GGTGTTACTT TCAGAAATCT  
 41951 TTTAGTGGAA ATTGAAGTTT CCCTTATTCA TTTTCAGTAA TACCTAGTCT  
 42001 CTAATAAGGG ATGCCTTTTG TATGATTTGT GGAATCATT AACAATCATCT  
 42051 TTTTATTACA TGGATAGAAT GATGAGATCA GAAACGAAAA TGAGTTCCTG  
 42101 GTCTAGAATG TGGCTTTGGT TTTACCCTTC ACCACATCCT TCTCTGTGGT  
 42151 ACTGTCTCCA AAGAGGGAGA CAATCTAAAA GAAATTAGCA AATTCTATAT  
 42201 TGACTACTAA ATCTAACATT GCTTTGCCCTC CTGATTAGTT CTTGTGTTAT  
 42251 GCAACACAGC AAAAGACATA GAATGGCTAT GTTATCAACA TGCTTTGATA  
 42301 CATGGATATT CATGCCTGGG ACCTTGGTAA CACAACTTT TCACACTATA  
 42351 TTGAGTCCAG CTGGTAGTGT GCTGCTGTCC ATGGTGTGG ATCCCTAGGG  
 42401 TCATAGGATC TGTATAATCT GACTCTAAGA TGAACCTTCT GGCTTACATT  
 42451 CCCATTTGCC ATTATCTTCG GCTTCGGACT CGATGTCTC TGAACATAG  
 42501 GACAATATGT AAAGCAAACCT GCATTGTTTG AATATCAAAA CCAAATGGAT  
 42551 GAAGGTTGAT GGAGCTGGGA AGGAGGTTTC TTATGGAAAG TAGTGTTTAC  
 42601 AATGGGTACT GTGACCATGT AAGTTGGAAA GAAATAGCCA TAAGGAGAGG  
 42651 AGAATTGAC ATGAACCTTG GCTTTGAATA ATATTCTGTT TATGCCAGAA  
 42701 TCCCAGACTG GAATGTTTGG AATTGATTG CATTGTAAAA TCACATATAA  
 42751 ACTTAACCTT TTTGGAATCT TACTGTCCTT GTGTTGAAAA TGTCTCTAAT  
 42801 AAGGCTGGGG TTATAAAAGA GCCATGTATT TCTATTCAAA TGCATGAAAA  
 42851 AGGTCTGAGT GAACTTATGA CTTCAAACCTC CCAGAAGAAT GAGAGTGTCC  
 42901 AGAGGAGGAG TGAAGGTGTA GTCAGGCTGC ACTCCATTCA TCTGTAACCT  
 42951 CTCCACCGCT GGAAGTGTC A GCCTTCGCAA ATGGTTGACT TAGGAACATA  
 43001 CACTGTGGGT TTGTACTAGC AAATTTGTTC TAACATCACA GAAACTTTTT  
 43051 TCTTCTATT TGTCACTGAT GTCTTTCTTG CTTGTTTCTG TCAAAGTTGA  
 43101 ATGTTTGAGA GTTCTTGAAA TAGCCCGATG CTGTAACTGC AATGCTTACA  
 43151 ACCTGGCAGG AAGAAAAGGA GTGGGACCTT GCCGGCTGGT TCTAAGTATT  
 43201 TTTAGGTCTG GGAATTCAT GACTCACTGA CTTGGGTTGT GGGGTTGTTA  
 43251 ATCTTCTCCA GAACAGTGTA CAAGTATAAA AAGAATAGAA GCACTATGGT  
 43301 GCTTCAGTAA ACTATTTTTC TGTCAAAGAA AAGTAAGATA TTGTCTAGCA  
 43351 ATGAACACCT GGGTTGGTTC CCAGCTCTGA CTCGACCCCG GACTGAAAGA  
 43401 GGAACAGATG AGTAATAGCT GATTTTCTG CACAGCTTAC AAGGCCCAGG  
 43451 AGAGTCTAGA AAGTCTTCAG GTCTAGAGAG GAAGCTCCCA GTCACAGAAC  
 43501 CTGAGGAGGT TTCCTGTTTT GATTTGCCTT ATTTCAATAC TGTACCTGAC  
 43551 TCAGGAGCAT CCCCTCCATT GAAGGTTTAG GGCCACAAAT GGCTAACCAA  
 43601 CTGCAACTTC ACATTATGTG ACTTTTGGAA ACTCTTGACT AAGTATGTGT  
 43651 GTTGAGAAGT GAGAGGGGCT AATGTTAGCA GTGGAAATCG AGTCCAAGCC  
 43701 AAATCATAGT GGGAACCTAG GACAGTAGGG GCAAAGTGAA TGCATTGTGT  
 43751 GCCTTAAAGC TGTCTCTGCG CCTATTCCC CCTCTTCCC TCCAGCCGTA  
 43801 GATGTCATGC AGTCTAGCTT TCTTGCTCTT GGCCTTAGAC TATTCCTGCA  
 43851 TGCCTTGTC CTATCCTTG TCAAATCCAC CTCCCCTTCA TCCTTTCCAA  
 43901 CTCTCTTCT TGAAGTGTTT AGCTTACCCT ATCTAATTGG AGAGGGAAGG  
 43951 GCTCCTATCA GGTAAATTTCT CTGAGATCAG AGACCCTCCT GCCTTCTTCA  
 44001 TCCCACATT CCTCACAGCT CTAGCCCAGG GCCAGTAGTT AATCAACAAT  
 44051 TGTTTCTTAA AGTAAGTGCA AGCTACACAT TTGCTTTGTG GGTGTTGCCT

FIGURE 3, page 14 of 188

44101 TTTCATTCTG GCCCTTCCCA GTAATATACA AGTGAGGCAC TGGGCCCTTT  
44151 GGTTCCTGGAA AGGCACCTTT AAAGAAATGT TCTATGGCTA TCATTAGATT  
44201 TTCCTGGCTG ATGCACTGAA GAAAATTCAA GTAAGCTTAG TATTATGGGT  
44251 TGAATTTTGT TCCCCAAAAA GACATGTCAA AGTCCTAAAC CAGAACCTGT  
44301 GAATGGAACC TTATTTGGAA ATAGGGTTTT GGCAGATATA AAGATGAAGT  
44351 CATAATGGAT TAGGGTGGGC CCTAATCCAA TAGTGAGGTC CTTACAAGAA  
44401 AAGGGAGAAT TGGACACAGA CACACAAGGA GAACATCGTG TGATGATGGA  
44451 AGCAGAGAAT TGCTGGCAAA CACCATGAGC TGGCAAGTTG CAAGGGACCC  
44501 TCCATCCCTA GAACCTTCAG AGAGAGCATA GCCCTGCCAG CCCCTTAATT  
44551 TTGTACTCCC AGCCTCCAGA ACTGGGAGAA AATCCATTTC TCTGGTTTTA  
44601 AGTCACCTAG TTTGTGGTTT ATTATGGTGG CCCTAGGACA GTAATACACT  
44651 TGGAAAATGT TGGACTCAGT AAACCTTAGT TTTCATTGTT GTTGATGATG  
44701 ATGATATTTT GACTGGAGAA TCTCTCATGA TTTTTCATAG ACAAATATGC  
44751 ACTCTCAACA GGGAAATGTAA TATGCAGCAT TTTCCAAACT TGGTTTTCTG  
44801 TGGGATTTAA CAAAATTAAT TGTGTTGTTT TTAACCATCT CAGGGCAGGC  
44851 ATTCATGCA GTGCCTTTTG CAAACCTGTC CCTAGAGAGC CCAGGAAGAG  
44901 GCAGAGCTTC CTCAGAGTGC CCAGGCACCA GACTGTGCTC CATGGGCTGT  
44951 GCATGTACAG AACAGTGTGA CAGCAATAAT AAGAATATCT TCTTGGTTGT  
45001 TCTGATGTTT TCAGAGAATG TTCACGTTCT TTACCTCCCT TTCCCTTGAG  
45051 TAACCTGTGA CACAGAGCAG ATAGCACTGC ACACATGAGA CTCCTTCCTT  
45101 TTCATGTAA TTTTGTAGT GGTGAGGAA TGCTTCTGGG CTGGTGCCCTC  
45151 TCTGATGCCC TGAACCTCTC TTTAGTGGGT GGTGGTTGCT TAAGTGACTT  
45201 GATCTTGCTT CATCATATCC AAGGGTGTTT GTACCTTATG TTGGCTGCCA  
45251 AGCCCAGAGA GCTGAGAGGG ACTTGCTGGG GGTGCTTTGT TTCCAAGTTA  
45301 GATTGTGGG ACTTGAAGGT AGACACAGTA GCAAAGATTG TGGCAGGACT  
45351 ACGAGACTGA TAGGGTGTCC TCTGGGAAGG GTGCATGCCT CCCCAGGGA  
45401 GACAGAGCCA TTCCTCCTTC AGGACAGTTC CGTATGACCC TGGATATTCA  
45451 TGCTGGGAC CTCCTATAT GAGCTGCATG GGAAAGAGTG ATGGCTGCAT  
45501 CTCTCTGTGC TTTCCAGTGC AGGTATTTTT ATAACCTCCCT CCAGACATCT  
45551 AAAATTTAAT TTCACCTTTT TCTGAAGCTT CAGCAAAAGG TGCCACCCTT  
45601 ACCTTTCTAA GATACTCCCG TGTCCACTGT GAGGGCCAAT GCTGATTGCG  
45651 ACTGCCAAAA TTCATCTACT CAAACCAGTA CTTTTCTCTG ACTGTTCCCA  
45701 TCATGTTGAA TTACAGCCAT GAGCGAACAC TTGAGTAAGC TGAGCAAATG  
45751 GCTGGGATAA TTCAGCCCTT GTCAGCCATC TCTGAGGAGC ATAGGGCGAT  
45801 CTGTAAGCTA TTCCAGATGT CCGTGATTGT GCTGTGATTA GGGGCTGCGA  
45851 GTTTGGGGAT GAGCACCAT GTCATGTTGC ATTGCCACC TCCCAGCGCT  
45901 GGCTCCCGCA CATGTTCCAG CCCTGTCCAG CCTGGCCTGG CTTCTAGCAA  
45951 GGCTGTGAGG GAACCCGGGA GAGGAGGGCT GCTGCTGTCT TCAGGGAAAA  
46001 GGA AAAAAGG GGGTGACCAT CACATGCACA CTCAGCATGG CTCTGGCTCC  
46051 TTTGCAGTGC AGATCTCCTA AGCAAACATG ACCTGCCAGT CCCGAGTGTG  
46101 AAAC TAGAGC CTCAC TTTCT GAAAACCCGT GGAATCGGTC CCTAATGGC  
46151 AGCTGCCCTC AATAGCCCTT TTATAGTTCT CTGCATCTGG GTGAACCTCA  
46201 GCTATCAAGA ACTGCATCT GTTTACCATT AATTTTGATT TTGTGTAGCA  
46251 GATGTTTTCT GGATCTCTCA GTTCCCTGCC TAATCTATCT TGGTATAATG  
46301 TGAAGTGGCT GACTGTCTTC AATGAAACAG AATTAATAAA CTCCTAGGTT  
46351 ATTTTGGGGT AACTTCTTTA ATAGCTGCAG ATGTAGGGAA TTTAAAAGGG  
46401 AGCCATCCAG ATTTGACAGT GCCTGGAGCC GTGGGTCTTT TTCAATTCAA  
46451 GACTGCCATC TGGGGAAAGA GATGGCTTTT CCTTCCCCCA TGCCACCCTC  
46501 TCTCACATGC AGTGAGGCAC TGAGTGTCTT TCTACAGTCA CTGGGCTCAA  
46551 AGAAGTTGAG AGTGACATCT ATCTCCTGTC TCCCAACCTC ACAGAAATTG  
46601 GCTCTTTCTG GGTGCGTTG CCTTGTTTCA GCTGCTGGGA AACTATATTG  
46651 TGCTTAGTTG CCTGAAGTTG AATGGGAAGT GCATGGTGCA CCTAGCCGAT  
46701 GTGTCTGCT TAAGTAGTGA TTTGGTGCCC AGTTTGTATC ATGACCAATT  
46751 GGTAGGCAGC TTAATCACAG TGTGACTTCA GGTAAATTAC TCAACCTTAC  
46801 CTGAAAAAGG ATGCGGATAG TAATAGTACA AACCATCAGT CCCAATTCTG  
46851 AGTTGTAGAA ACCCACTTG TGCTGGCTGA AGCCTGAAAG GCCTATGAAG  
46901 CTGCAGAATC TAAGGGTGGA TCTGGCTTCA AGAACAGCTG ATAAAAAGGAT  
46951 TCTCACACTC ATCTGTCTCT TCCTTCTCCT GGCACATTGG CCTCTTCCAG  
47001 GTAGCCTTCC AGGATGGCCA CAAGCAGCTG CAGCTCAGAG TCCTGCCTGC  
47051 TCACCGTCTC AGAGGGTGAA ACTTTTCCCC CAGAATGACA CCAGAAAAAT  
47101 CCCCTCAGGG TTTGCAAAAT CATCCTCATC CAGACCACAG GCAATGGTTT  
47151 GGTCTCTCAA GGAAGATTCT GTGCAGGGAT GTGTTGCGTG TCCACACAGC  
47201 CTCGTGGACA TATTGGGAGG GGTGACTGTG TGTGCAGACG CCTTGGCACA

FIGURE 3, page 15 of 188

47251 GGACAGGCAA TGTTGGCAGT GCTCAGTGCA TGGGTAATTT TTAGTAGAGC  
 47301 TCTTACAGGC CTGGCCATAG ACATAGAGGC CTTTCTCAAG TAAGCCAGTT  
 47351 CATTCTTCTG TCTCCAAGAT GTGTTATGA GACTCTGGAT GTTGTGGCCT  
 47401 ATTGACTTTT CCATGAAGAA TTATTATTAT TATTATTATT ATTATTATTA  
 47451 TTATTATTAT TATTATTATT TTGAGTCCGA GTGTCACTCA GTCACCCAGG  
 47501 CTGGAGTGCA GTGGTGCAT CTCGGCTCAC TGCAAGCTCA GCCTCACGGG  
 47551 TTCACGCCAT TCTCCTGCCT CAGCCTCCCG AGTAGCTGGG ACTACATGTG  
 47601 CCCACCACCA TGCCCGGCTA AAGTTTTTGT ATTTTTTTAG TAGAGACAGG  
 47651 GTTTCAGTGT GTTAGCCAGG ATGGTCTCTA TCTCCTGACC TCGTGATCTG  
 47701 CCCGCCTCAG CCTCCCAAAG TGCTGGGATT ACAGGTGTGA GCCACCACTC  
 47751 CGGCCGAAGA ATTATCTTAA ACTTAGCCTA TTCTGGTCCC TTTCCTCTGT  
 47801 CAGAGTCTTT CTTTAACTTT ATGCTCTAAT TCTCTCTTTC TACAATCAGA  
 47851 AGAACTAAGC CTTTAAAGAT GTGCCTTTAA GAATTTAAAG ACAACCGCCC  
 47901 GGGCTCGGTG GCTCACGCCT GTAATCCCAG CACTTTGGGA GGCCGAGGTG  
 47951 GCCAGATTGC AAGGTTAGGA GTTCAAGACC AACCTGGCCA GCATGGTGAA  
 48001 AACCCCGTAC TCTAGCCAGG ATAGCAAAAA TTAGCCAAGC ATGTTGGTGC  
 48051 ATGCCTGTAG TCCAGCTAC TCAGGAGGCA GGAGAATCAC TTGAACCCAG  
 48101 GAGGCAGAGG TTGCAGTGAG CCGAGATCAC ACCACTGCAC TCCAAACCTG  
 48151 GGAGATAGAG TGAGACTTAA AGACAAACAT AAACCTCTCT CCAAGATCA  
 48201 GGGGCTTTCT GAGCACTGGT GTCAGAAATC ATCCTTAAGC ATTACAGATA  
 48251 TAAACCATCC CATCCTCTGG CTGAGCTCAG CTCTCTCCAG GGATTGGAGG  
 48301 CAGCAGGACC TTGTGGTGGA TAGCTCAGGG CTCACGATGG ATCTGCCAGT  
 48351 GATGCTATCT GAACCTGAGG TATGTAAATC CTCCCAAGA GCCACAGCGC  
 48401 CACTCACCTG GTACCTGTAG CCTTTGCCCT GGGACAGCTC TCATGCTGCT  
 48451 GTGCAGGCAC AAGTTTTTGA AACGCAGGGG TCAGATGTCT GCCTCCCAGG  
 48501 GTCCCTGTG CCTGACACAG AGTGGGCACT GAAAAAGTGT TAGATGCCTG  
 48551 GCATGTCCCA GGGCTGACTT GGCTTTATGT CATCTCTCCG TTTCTCACAA  
 48601 AGGTGATCAG ACAGATACAG GGCCTTCCAG GTTGTGTTGAC TGTGAACCCC  
 48651 ATAGCTCCAG GATACCTGGT CCTATTTGCT GAGCTTGCTC TTCCACCAG  
 48701 TCCCTGGGAA TGCTCACTTT CCTTAACTAC CATCTCAGA GAGCTCCTCT  
 48751 GCCCTTTCTA ACAACTTGTG GGTCCCTCTG CTAGAAGGAG CTTAAACTGT  
 48801 GTTCATGCAC ATGAGCTAAA CCTCTGTGGT TATGACGGGC AAGCTATAGG  
 48851 TCGGTGTGGG CAGGATAATG AACCCCTAAT CACTCGTGCT TGCCTAGCGG  
 48901 TCTCCTTAGA GGTGTCATTG CAATATTTGG GCATAGGTCA CTATCTGGAA  
 48951 TTTGTGGGGA AGAGTCCAT TGTCGAAGAG GTCATGACCC CTAAAGGGTA  
 49001 TGAACCATG CACATCCCTA AGGACCAAAA GACAGGATGG TGTGACCCAG  
 49051 CCTGAAGCAC GCTGATCCTG CCCCTCCAGG ACAAGTGGAG AGAGATGATG  
 49101 GTGCTCCCTG TATACCTGCT GAGGTCCCCA CCCTACCCAG GAGACTCACC  
 49151 CTCATCTCTC AGATCCCAGC AGAAGTTAAG CTTGACATTT GTCATCTTCG  
 49201 TTAGCTTGACC AGTCCCCAAG CCAGAGGCAT TTCTTTGCTT TTCAGGAACC  
 49251 CTTGAAATTA TCTTCTTCAT ATAAACACTG AAGCCCTTTT CAAACCTCAT  
 49301 TAAGCTATTT GCCCCAGCAT ATTAATGTGC TATCCACCAG CCTCTGGGGT  
 49351 TAATTATCTG TGCTTTAAAA TCATTTGTTT CTGTCTCTTT TATCTCATTG  
 49401 CTGCTTGGCA ATCTTTCTTT ATTAGGAAAC GAAGTACAGG ATGCAACTGA  
 49451 CCATTATGTT CTAATTCTAT TCTTTTCATC AAAATGAGTT CATCTTTTAA  
 49501 AGCTCTTTTG TAAAAAACAA CAAACCTGTC TTTTCATTAT TTTAAGATTG  
 49551 TGTGTTTTTT TTAACAAATC TTTAATCTCT CTGCTTCAGC CGGAGCAGAG  
 49601 CCAGGACTGG AAATAATCTG TAAGGGGAGA CCTCTCCTCT AAATCAGCAA  
 49651 GACCTGCCAA CACTCTCTCT CCTGATTGGC CTCACCTACT CTGCATTGCG  
 49701 CCCATTCTC TCCTGTGGCT GTGGTGAGGG CTTCCAAGGT GTACAAGTTG  
 49751 GGCTTGGTGA ATAAGCCACA GTGTCTTGGC AGATCAGGCA ACCAGGGTTG  
 49801 GAAAACTCTG TGCATTCTAA CACACCCAC TGGTCTCTAC ATGCTCTTAT  
 49851 TTGGGTATATA TTTCTTGGCC AAGGTTGCCA TTGGGTCCA AGAAATGCGT  
 49901 CAGGGCCTGC ATTAAAAAGA AAAAAAATA CAAAAACCTT TTCACAAAAT  
 49951 GTTGAATGTT GCTTTGAACT CTCAGGAAG TCAGGGAGCG TGTGTCCAG  
 50001 AAATGAGCAG GTAGGATGGG CACTGGCTCC ATGGAGACAG TGACCCACAG  
 50051 CCTTCCGGGA TAAGAGTGCA GCCAATAGTG GGGAGACCTG GGCCGGGGTC  
 50101 TGAGCGCAGT CAGTGCAGTT GGATGGTGCA CAGAGCTGGT TCTCCCATGT  
 50151 ACTGCAAGCC AGTGATTGCC CCTACCTGT TCTTCGGGGC TCCAGCTTCT  
 50201 CAGCTCCATT CTCTGCCCCCT CAATGGCTCT CTCACCTCAT CAGTGCCTCA  
 50251 AAAACAATAT CTGGGACTCT AGTTTGATAA CTACTACTTG CATTGGAGAA  
 50301 ATGACTCCTC TGGAAAGGTG AATACGATTC TCAGAGTTTG TTGAGGTTTT  
 50351 ATTGTTGCT TATAGAAGTT TCCTTGGGCT GATTGGAGTT TGGTGTGCAG

FIGURE 3, page 16 of 188



50401 AGATGACCCG GCATAGTCCC TGCCCTTATA GATGAGTCAG TTGAGAAGAT  
 50451 GCCCAAGCGT CCTGCAGACA GATGTCTACC TGGTGTACCT GCACCATGGC.  
 50501 CAGCCACCTC TCAGTTGGGT CCGCAACATA GAGAGAGCAT TTGTTCAAGTG  
 50551 TAATTGATGT TGGAATCTGG GAGAACAACCT CTCTGAATGT TCTGGTGGAG  
 50601 GTGAAGTTTC AGGATCTTTT TTCCAAAGCA TGGCTGTCTC AGCAGAGGGT  
 50651 CCCCTTTGAC TTTTAAGGGC ACACGTGTACC AGTGGTGACG TTTTGTGTGC  
 50701 AAATAACAAA CCCCACCCCA ACTAGCTCAA AAAAAAGAG GACTTATGGC  
 50751 TTATGTAATT GGATAGTCCA GTGAGGGTGG AAGGTGAGGA GTGCTGGGCT  
 50801 TCAGATATAC TTGATATGGA GTGTAAGGAC CTGGCTTCTC CCTCCATTTT  
 50851 GCCCCTCTCT GGGGGTCCCC CTTTCATGGT AGTGCCAGCC TCCCCTCCTC  
 50901 ACAGCTCCAG GTCCAGTGGA AGACAGATGG CCTCTAGTCC AGTGTATCCC  
 50951 ACAAAGTGC TAAAGCTCAC TGGGATTGGA CAGACTCAGG TCATGTGATT  
 51001 CATGCACTTA ATTAATGCTG TGTGCTGTTG GGTTTCCTGA AGTCACCAGC  
 51051 CATACCGCTG GTCAGGATAT CATGAAGTGA GAGTGGGAGG AAGGTGGATC  
 51101 CCCAAATGGC AATTGGGTCT GAATAAGGGA CACAGAAGCA GGAAGGTAAA  
 51151 AGGAAATTCT CTAAGCATAT TAACGTCTAC TTAATGATT CACATCTGGG  
 51201 TGTCTCTCAC TCTCCACCCC TAAAAGGATT CTGAGTGCCT GAAAAGCAGG  
 51251 CTAAGAATCA GCAAACATTC ACCTAGCGTT TCAGGGGGGA GGTGCTCTCT  
 51301 TCTGCTTCA GAAGGAATCC AAGGCTAAGA GATTAAGCAG TTGACCCAAG  
 51351 GTCACAGAAG CTTCTAACAG AGTGTGAGTT TGAACCAAG TCCCTGATGA  
 51401 CAAATAAAGG GCACTTTTTT GTTGTTCCTA ATCAGAGCTG CCTCCAGCGA  
 51451 TTGGGTTCTT TCACCTTGTT CTTTGGCCCT GTCCCTCAG GTAGCTGCAG  
 51501 GAGGTACTCT GGGAGGTGCA TCAAGCATT ACCAGCCGAA ACTTGAGAGG  
 51551 GGTTTTACCC CAAACATGAC ATCCTTTCTT TAGCACTTTA GCCAAAGCAC  
 51601 ATAAGGATGA AAAGCAAATG AACATCAAAT GATGAAATCA CCAAATAG  
 51651 AGAGAAAAGT GAATGAGCAA GCCCTCACC TGGCAGTGGC TTCAGTCCTT  
 51701 TCCTTGATGA TGTTGTGAG AAGCTTTTAT TTTCCACTTT TCCTAAGAGA  
 51751 TCACCTTCTT TCTTGGGAAG GGGTGGTGG AGGCTCGCTG GGCTGGCTGC  
 51801 TTCTAAATGG CCATGGGGTG GCAGACAGGA ACACAGGATG GGGGATGGAC  
 51851 CTCACCTATA ACCAGGGCTG CTGTTACAGGA GCCCTGAAC TTTGCAACCT  
 51901 CTGCCTCTG GGTTCAGTG ATTCTCTTTC CTCAGCTTCC AGAGTAACTG  
 51951 AGATTACAGG CATGCACCAC CACGCCCAGA TAATTTTTGT ATTTTTTGGT  
 52001 AGAGACGGGG TTTCACCAAG TTGGCCAGGC TGGTCTCGAA CTCCTGACCT  
 52051 CTGGTGATCC ACCTGCCTCA GCCTCCCAA GTGTTGGGAT TACAGGTATG  
 52101 AGCCACCGCA CCCCAGCAGG AGCCACTTTT TAGTAAGTAA TTTCTATGT  
 52151 GTCCACACAT TCAAGACAAT TTAGAGGCAA AAGTTTTAGT CCTTTACTAT  
 52201 AAATTCTGTA GATTGGAAAT GGAAACATT TCACATTCAA CTTCTTATTT  
 52251 AATCTTCATA AACAACCTCT GAGATAGGCA TTGCAATCTT ATTTTGTAAA  
 52301 TTTAAAAAAT GAGGACCTTT TGTACTCTGT AGGAAATTGA TCAAAGAATT  
 52351 AAAATGGGCT TCACTGAGGT CATTGAGGAA GATACATTCT GTGGGAATCT  
 52401 GATAATGTTT GTGTAATTCT GATTGAAATA TTCGTATTCA AAAATGTGGA  
 52451 TTCATTGTTT TCAGTCTAGC ATGCCTGCAG AGTCAGAGGT CCTGGGACCT  
 52501 CCCCCAACCT CCCATCTCGG GGAGCTGTGT CTTGCTGCTG CTACCAAAGG  
 52551 GGAGTAGAGA ACCCAACTT CAGAAGAAAT AGGCCTGTAA AAAACCCACG  
 52601 GGTCTGGGCA ATGCGTTGTG GGGGGTAAAA ATATATTTCA GTCTATTTCG  
 52651 TTTACTAATT TTAGCAGTTA TTTGCTCTCC CTTTTTGCTG GAAGCAACAT  
 52701 TCCCATCCAG CTGCTTGGCT GCTTCATTTG AATTTTATC ATTTGTGTGA  
 52751 GCCCCTGCAT GTTTGGGACAC AAAATGGGAG TCCTGTGGCT CAGAGGGGAC  
 52801 CTTGATTGTA TAGGTCAGA TCTAATCTCC TGCTCAGAAA CTTACAGCGA  
 52851 AAATAAAATG AGTTGAGGTT TCTGTTTTGT GTGTGTGTGT TTATTTTTTA  
 52901 AAAACAGTAG GCCTGTAAAG CTGTGCTGGC ATATTACTTT TTTCCCTTTT  
 52951 ATACAGAATT TAAAAATAA CTTTACATTC AAATAGTGTA ACCGGTGTGC  
 53001 CTTTTGCTCT CAAAGAGCTT TCCCATTGT CCTCTCATT AATATGCTCA  
 53051 AGAAAGCCTG TGAGTTGGGA AGAGTGAAGA TATGGTCATT GGTATTTGAC  
 53101 AGAGGAGGAG ACTGATACTC AGAGATGGCA AGGGACTTGC CCCGGGTCAC  
 53151 ACAGCTAATT GAGGCAGAGT TGGAGATTAT AGCGTCCAGT TCTGTATTAC  
 53201 TCCCACCAAG GCTTCCTCTG AAAATAAGAG TTTATGGCAG AAGTTTTCAA  
 53251 ATTAAGACCC AATGGGAAAA CACAGAATTT TCAGTCTCTG TTTGGTCTT  
 53301 TTAATAATAA ATTATTGTAA AGATGACTTC TCTCATCTGT CAATGTAATG  
 53351 ATCCCATACC TGGGGTATTC AAAATATTCA AAATGTGTAT GGAGGAAATG  
 53401 GTAAAAGTTA ATCATTTTCA CAGTACCTGT CTGTGGTGGG GTTTAATTAT  
 53451 CACTTGACAT ATTTATGTTT TAAAATGAT GACAGTTTAA AATAGAGCCA  
 53501 GAGAGAGCCA GAAAAATCCA TTCATTATCA TGTGTCAGGT GCTACATTGG

FIGURE 3, page 17 of 188

53551 AATAACCCCC AAATACAGAT GGTCCCTAGA CAGATGATTC TGCAGCATTT  
53601 TCTGATAGCT ACAGATGTCC CTGCTACTGA AACCCAGACT GAGAATACCA  
53651 TTCTGACCCT GCCGTCAATA TGCAGAGGGT GCTTGGGTGA ATCTAGCAGC  
53701 GCGGTTTGAT TCTCGTACCG CATCGCAGAT GCTAAACTCC CCCATGCTCT  
53751 CTCCAATCCA AACCTCTCAC TGGTCTTCTG CAGAATTTCT AATGAACAAG  
53801 ATAATTCAAT GTGAGTGTGC TTTGAATGAA TGAATGAATG CTATTTAAAC  
53851 TACAAGGTGA CAGATATTTT CATGTGCCTC TTAGGAAATT GCATGCCTTT  
53901 CCAAGAAGAC AAGGTTGAAA AGCAGCTTGT TGTGTTGAA TAAGCTCAGC  
53951 ACTGTCTGTC TGTTTAGGAA AAAATAAATA ATTGTTTCTT GCCCATGAGA  
54001 ATTCTGGAAG TGGAGCTGTC CAGAGCTGAC CCGTCTGTCC ACATTTCAAA  
54051 TTTCACTTTG GAGAGTCTCG GGAGAGGGAG CAGATGAAGC CATTTCAGAA  
54101 ATGTAAATGC TGTTTGACAT CTATTAGCTC AATGCTCATC CATTGCTGAC  
54151 AGCAGGATCC ATTAGGACGC GAGTGTCAAT GATCAGAGAC ATTTGAAATA  
54201 TAGCGAGAAA CATGCTACCC GCAGCAGAGG CCCATGTAGA TGAATTGAGA  
54251 GAGCACTAGA TGTGCCACC ACTGTGGTCC AGGCACCTCC CCCCCATCTC  
54301 CCCAGGCTCT CTGTCTGGAT TTCCCAAAGG TCAGCTGCGT AGCCAGTCTT  
54351 CACGAGTGA CTCTGTCCAC CAAGCAGCCT GCCTGAATGC TGGGCATGGC  
54401 GGTGACCATT CCCTCCTTGC AAGGTCGGGC TTGCTTCTAG TCTCTACCAT  
54451 TCATGGAATC ATCCAAATGA TCCAACCTCA GATCAAAGGC CCCACAGGGT  
54501 CACCCTTAT TTGTATAGAT GAGGTAGGCT TGAACAGGTA CAGTGACGTG  
54551 CCTGAGGTCC CAGGGGGCTA GTGAGTAGCA GAGGAGGGAT TTGGGGCTCT  
54601 AAGCCAGTGC TCTTAGTTCT CAGGGCTCTC TGGGTTGTTT TTCTTGCTTC  
54651 CTTTCCCTTG CTTCCACCCC TGAGTCCAGG TTCTCCCTTC TCTGTAGGGT  
54701 GGCACAGTGT CCAACATATC CCAGAGACTT AGCCGCCATA TCCTAGTGAT  
54751 GGGGGTCTCG GCTAACTGAG TTTTCTAGTT AAGTTCTATG TTTTGAATTC  
54801 GTTTAAGTTA TTTCTAAGTG TTTTGTGTTT CTGCCTTAGG GGATCGGAGA  
54851 TTATATGGGA GGGGGCACAT GATGACAAC TTTGTTATTA AAGCCTCCAC  
54901 CATATGCCAT ATGCTATGCT AAGTTCACTT ATTTTAACAC TCCCCAATAG  
54951 TCCAATGTAG CCAGATAGTG TGATATTCTG TTTTAGAAAT GAGAAGACAC  
55001 AGCTTTGAAA GGATTTGGA TTTGGTTTGC TGGGCGTTTC AGTAAGTTGG  
55051 TGAATTATTT ATTGACCTCA CTGTACCTAA ATATTCAATC CTTTGTGGTG  
55101 GGATGTCCCT GTGTCTTGCT ACTGTAGCTT TGCTAGGACC CTTGTCTCTGA  
55151 GGAATCTCAG CTCTAAGGCA AGTCTGCAAG GTCACCTCTA AATGGACAGT  
55201 CCTTGAAGA CTTAGGAAGA GCAGGCGCAT CCATAGCTGT GCTTGATGGG  
55251 AGGGGAACAT GTGGAGGACA GAGGGAATG GAAAAGAAAC GTCCGAGACA  
55301 AGACACTGAG AAGATGCTGC CATGCCTCGG AAAAGAGGGG AAGATGCTGG  
55351 TCCAGGCTAT TAGTCTTGGA CAAGCCTAGG CTTCTCTCCCT CTTGATACAG  
55401 ACTGTGGGTT CCGGGTACCG CCGGACTCAC CCTCTCTCCC GCGCCCCCTG  
55451 GAGGTGAGAG GGAGAGTTAC GTTTTCCAGG CCCAGAGACC TGATGGCAAG  
55501 AGACTAAGTA GCCGCTGCAG TTGGAGCACA GGAACCCGA GGACCAGGAG  
55551 ACTTTACCCA GAGGTCGCTT GCCCTGAACC CTACAGTTGA GAATTCTGTG  
55601 GCTCTTCTAC CATGTGCAAG TGTCCAGAAA AGACTTGCAC ACATATATCT  
55651 CTCTATCTG CTGCTAATTC TTAGAACC CACTGTTAGG GCTTCATCCC  
55701 CTGTTTCTTT ATGAATACCC CCAAAGTCAC GTTGGGTCTT GAAAGAACAG  
55751 CTGAACTTTC GTTGAGCCAC ATCATCTCCT ACCTGGAAC TCACCAAGCC  
55801 TGTCTGCCCT TTCATAAGAA AAGTAAGACA GGTTCCTCCT AAGACCTTG  
55851 AGCCCGATTT CTGTTCCATA TTTGTTTCAT ATGACAGGTC TCAAACCTGGT  
55901 GGCTCGTGGG CCAGATTGAG CCTGCAGCCA TATTTTGATT TATACCATAC  
55951 TTGGCTGCA GAGGTTTTTT GTAAACATAA AAATATTCA ATATGAATGA  
56001 GTTGCCATCG TTTGAAAATA AGGGCATTTT ACCAACAGAT TCAAATATCC  
56051 AAATATACAG ATGATCTTGG AAAGCAAAAT GCTTTGATAA CCCTGGGCCC  
56101 ACATGACCTC ATGGCAGCAA CAGGCTTGGG TGAGAGCAGC CGTGTCTCTG  
56151 AAGGGAATAC ATGCTCTCCT GCTTTTCCAC AGTCTCACC ACTCCCTAGT  
56201 GCATTCTCTA TAGCGAGACT AAGTGTGTTA GATACAGTTC TGTAGAATAA  
56251 ATATGACCAA GTAGAAATTC CAGAAGACCC ATGCTCCTTA AATTACTTGT  
56301 GTGGCTCCA TAGACATTG AGTTTCAAT CCTGTGTTG TACTAAGGTA  
56351 TAGAACTTGT TAATTATGGA CCAGTAGAGT CAGATGTCAG TAAGGAGATG  
56401 GGGGAGAGAG GAAAGTGGAG GGCAGGAGG AAGGTGGGGA AAATTAGAGT  
56451 AAAGGCTGAA GCAACCTTT ACCTCCTCAG CCCTCCTTGA ATGTCTCTAA  
56501 TGATGCTGGT GTCTAGAAGT GGGTCCTTGC TTTAGGCAGT TAAATCTTCC  
56551 ATCATTCTAT CTTATTTTTT GATATTTGTG CCTTAATCTA TAAATATTCA  
56601 CTCTAGGCAG TACATTTACA AGCAAGGTTT AAGCTTGGTA ATTAATATTT  
56651 GTGCCTCTCT ATGTAAGTTA TGTCTTTAAA ATGAGGCAAT TGCTTTAAGC

FIGURE 3, page 18 of 188

56701 ATTTAAGACA TTCCACGTAT ATTGCAGAGT AATTACTTTC CAAAGATATT  
56751 TCCAACGTAT ATTTTGTTAC ATCTAAATAT ACATTTACAG TACTCAGTAG  
56801 ACCAGAAATAG CTCTAATTTA TATATTTGGT CCACTGGGTT AGAAAAAGAG  
56851 ACATTTTAAA AGTATGTTTT TAATCAGTGT GTTTATCCCA AAGATACTGT  
56901 TGGCTCCTCC AGAATCACAC GATTTTATAA AAAATAATAA ATGTGGTGTG  
56951 TTCTCTGAGC TGATTTAGAC TTTAATGAGA GATGACATCT CAGCGGAGCA  
57001 TGAGCATGGC TAACTTTAA TCCGGGCTCC GAAGTGTCT AGAGCTTGGA  
57051 GGAACCTATT AACTCCCTTG GTGTCATTTT CTTAATGTAC AAAATTCAGA  
57101 TGATAAACAG TTACTGCCCT TGTGCAGTGA GAATTAATGC TTTCTGAGTC  
57151 GCAGTATTGT TTTGATAAAA TAGTCTTAAT TGTTTGCTTT GTACATTTTC  
57201 TGCTTTATTA TTTTATTAT TTCTCTTGCC TCTGTAATTG GTCGTTATTG  
57251 GGTTCCCAT ATTCTTTAT TAGTCATTTT ATAAAAGCTA TCTTGTGATT  
57301 TATCTCCCT CCCACACTTG CTGTCCCCC AAGTATCGTA AACAGAGGCA  
57351 AGACCCAGGC AAACAAAGCT GGTGGTATTG TTGGTTGCTT TGAGTGGCTC  
57401 GCCCGTTGTC TTTAGGATGG TTCATTCCCA ATTGCTTGAC TGCTATGAAA  
57451 GAACCTATAT GAATCCCAGG AGGTTTATTA GAAACATGTT CTAAGTAATA  
57501 GTAAGAAAGT TGGATTAACA GGGTCTGCAT GGAACTCTA ACCTCCCTCC  
57551 CTAAAGGAGG AGAGGAGCAA GATGAGTCTT TCCAGCTTGG GGCAGGCATC  
57601 GTAAGTGAT AATGACCACA TAATATGGCA CACTATATAA AAGGACAAGA  
57651 AAATCATCGC TCATACAGTG AAAAGAAGCC AAACCTCATT CTACCTAAAA  
57701 GTTGGCTTTC TATAACATTT CCAGCCACCA TTACATTGGG ACTTTATCCT  
57751 ACTCTTATTA CTCATATGAT CTCATTGAGT TGAGAGTTGT CTCCTTCTGT  
57801 GTTCTCTAAC TATTCAGTGT AGTTTTTCAA AATTATACAG CCAGACATTC  
57851 TGAGTATGAT CCAATGTACT GGTATATTA CTTTGAACAA GTTATTTAAA  
57901 CTTCTGTGCT TTGGTTTTCT CACATCTAAA ATAGTGGTGA TAGTTCTATC  
57951 TACCTCCTAT GGCAGTTGTA TGGATTAAAT GCATATTAAA AAGCTTAGCA  
58001 TAGCACTGGC CCACCTTCTG AGTAGGCTCT ATATTAGCCA TCATTGTTAG  
58051 CTATTATTCA CCCACAGTTG GGGCTGGGGT TGCCTGGGGT TGTGACTTCT  
58101 AATTCTAAGT GGCCTGTAG TATGGGGGAC TAGGATGTCT TTGGTGAATA  
58151 CTTACTGAAA TACTCTAAGT TAGAAAGCCT TGGATTTAAC TGGACCAATT  
58201 TATTTTCTTT CCTCAAAACT GAGTAATCAC ATTTATCCAC CATTTTCAGAA  
58251 AGAGTAGATA CTAATAACAT GAAAATTTTA GAACTATTTA TGCAGCTTAT  
58301 TGTTTCTGGC TATATGGGAG GCTAGATAAC TTAGCTGACT CTCCCACTTA  
58351 AAACAATTTT AAATAATGGA TAAAACATTT AAGCAATCCT TTAAATACCT  
58401 CAGTGAGAAA GCAGGAACATA AAGATTCATA AGAGGCCAAA AACTCAGAGA  
58451 AAGTTGGGTT CTAAGCAGA CTTTTGCTTT GAGAGTATTT GCCCAATGCA  
58501 GGTGACCTTG AACTCTGATT GTTACGACCT CAAGAGATAT GGGGACAGGA  
58551 GTCAAGCCTA GGGCAGATCA GTCTGTTAGA AAACCTCCTC TACATAAAAG  
58601 CTGAGACCCC AACAGACCCC AGTAGGCTAC CTCTCTAGTG TAAGGATGAA  
58651 ATAAAAATTA ACATGCCCTG TCTTCTCTCA AGGATGTGTG AAGAAAATTG  
58701 CCTGCCTTAA ACCTTGATGC TGAGTGGGAG CCAAAATGTT TCCTCTGAGA  
58751 ACAGGAACCA CAAGCTAAGC TTTCAGTAGA ATTCATATAA CAGACTAGTC  
58801 TGAGAAAAGCC TCAGCCAGA ATTTTGCTTG AAACAGTCTT GGTGATAGT  
58851 GTTCCTAGGT ACATGGTAGA GCAAACACAA ATCCTATGTA AAAGAAGTCT  
58901 TCTTCAGTAT TGGCCTCAAA TAATTTTGAC AGTTTTCAT CCAAGGAATA  
58951 TGAGCTCCA GTTAAAATTT GTAAAAATGA AAGGATGCAA AACACCAAAA  
59001 GAAGAGCCAG CAGAAAGGAA CTATGAAGAC CAGATAATAG AATTAACATT  
59051 TAAAAAACTG TGCATGCTGT GTTATAAGCA ATAAAAAGG AGCTGAAAAAT  
59101 ATAAACAAAG AATAAACCTA TAGAACTAT CTTGATTATT TGAAAAATAA  
59151 CCAAATAGAA TTTCTAGAAA TTAAAAAAG TAATTGAAAT TTAAAAATC  
59201 AAAGGATAGA CTTCAAGACA AACAGGGCAT AACTGAAGAG AACTGGAAGA  
59251 TACATCTGAA AATGTAACCA GAATGCAAGG AGGAGACAAA GCTATCAAGG  
59301 TTAGGAGGCA AGGAGACTAG GATAAGGAGG ACTCAGTCAT TTGTAATTGG  
59351 GGTAAAGAG AGAAAACAGG AAGAGTAATA TTGGAAGGGA TAATGGTTGA  
59401 AAAAAGTTTG CAAAACATAA GGAAGACAGC TATCCTCAGA TACAGGAAGC  
59451 CCAGTAAATC CCAATAGGA TAAACAAAAA GAAACGTAAG GCTATCTACA  
59501 ACAAAAACTT GCAGAACTACT AAGGACAAAA TGATAACCCT CAAAGTAGCT  
59551 AGAGAGAAAA AACAGATTAC TTATGAGAGA CTTATAGTTT ATTTCCAGT  
59601 AGAAATCAGA AAGCATTGGA ATATCTTTAA TATGCTAAGA GAAACATTG  
59651 GTCATCTAG AATTTTAGAC CTATTAACCA GTTCCACAA CACTCTTACT  
59701 CTTATTTTCT GTTTTTTCCC TTCTTTTTTC CCCCTTCAAG CTTCAATCTA  
59751 CCTTGAGTT CATTAACCTT TTCTTCAGAG TTTTTTTATG TTAATTCTAG  
59801 CCAGTGAATT CTTAAATTC AATATAATAC TTTACAGTTC TAGATCCTTT

59851 TGATTCTGTC TTATGGGTTT CAGTTCTCCG TTGAGCTACT CTTTCTTTTC  
 59901 TTTGCCACAC AGATGATAGT AATTTTGAAG TCCTCTGTCT GCTAATGCCA  
 59951 GTAGTGTTAG TATCTCTAGG TCTACCTCAA CTGATGATTT TATCTCATGA  
 60001 TTACAGGTTA CCATTTTTTG CTGTTTCATGT TTAGACTTTG TTAGGAGATT  
 60051 TTTTTTTGGT TTCTCCCTCA GTTGTAAATGT ATAGGCCTTA TTCCTAGGAT  
 60101 ATGATTCTTA CCCATAGGAC AAAGCCTTTT TGTGTAGTCT GAATATCAAC  
 60151 TAGTATGCTG CAATTCATTT CTGCCACTAA CCCCCTGGAG TTAGCAGACA  
 60201 CCCTAAGTTA AGGACTCAGT CCTCTATAAG ACTGCTCTCA CTTCAAACGC  
 60251 TAACCATAGG TTCAGGGTTC CCCCAGTCA CCTGCATTTT TGACCTACTG  
 60301 ACTATAAATT CTTGACTATA AACACTGACC ATAAATCCTT TCCATGACAC  
 60351 CCTTAGGTTT GATAATTCAT AGAGTGACTC ACAGAACTCA GAAAAGTTCT  
 60401 ATATTTTTGA CTACCATTTT ATTGTAAATG ACACAGATGA AGCCAAATGA  
 60451 AGAAATACAT AGAGCAAGGT CTGGGAGGGT CCTAAATGCA GAGCTTCCAT  
 60501 GCCCACTTCC CATGAAATCA GGCTACATTG TTCTCCTGGC ACATCAGTGT  
 60551 GTTCACCAAC CAGGAACTC TTCTGAGCTT AGGTGTCCAG GGCTTTTATT  
 60601 GGGATTTTAT TTGTAGGTA TTATCACTTT AATGATTGGC CGGGTAACTT  
 60651 TAATGATTGG CCATGTAATC CAGCTTCCCC TCTGTCTTGA GTTAATTTTC  
 60701 TGGTGCTATA AGGGAATACC TGAGACTGGT TAATTTATTT ATTTTTTTAA  
 60751 AAAAAGAGGT TTATTTTGGG TCATGATTCC AGAGGCTCAG GTTGCCAAAT  
 60801 CTGATCATCT TCTGTGTAGG GTCTCATGCT TCATCATAAC ATGGGGGTGA  
 60851 GCTGAGTGCT TGCCAAAAGG GCAAATGCAA GGACAGCCTC ACTTTATAGC  
 60901 AACTCGCTTT TGTGGTAATT AATCCAGTCC CATGAAGGGG AGGACTCCCA  
 60951 CATTCTAAG AGATTACCCA GTCTGTAAAG AGCAGTGTTA ATCCCTCTTA  
 61001 ACAACCCAAT CACCTCTTAA AGCCCCATC TCCCAACACC ACCACACTGG  
 61051 GGACCAAATT TCTAACACAT GAATTCCTGGG GGACACACTG AAACCATAGC  
 61101 ATTTACACAC TGCCCCCAG AATTTCATGT TCTTCTCACA ATGCAAAATA  
 61151 CAATTATTCC ATTCTAATAG TCCCAAAGGT CTTAACTTGT TCCAGCACAA  
 61201 ACTCAAAAAA CCAAAGTTTT ACCTATGAGC AGCTTGTGGA ATCAAAATGA  
 61251 GTTATCTACT TCCAAGATAC AATGAATGGA CAGGTATAAG ATAGACATTT  
 61301 CCCTTCTAAG AGAGAGAGAG AGAGACAGAC AGACAGGCAA GAAGAAAGGA  
 61351 GTATCAGGCC CCAAGTAAGT CCAAAGCCCT ACAGGGAACA ACATTAAGTT  
 61401 TTGAGGCTGC AGAATAATCT TCTTTGACTC CATGTCTCAC ACTTCAGCTC  
 61451 TCCCAGAATG GTGTTGCATG CTGTAGCTCC ATGGTTCTGA AGTCTTTATG  
 61501 GTGATTCCAT TCCCATGGCT CTACTAGGCA TTAATTAATG GGGGCTCTCT  
 61551 GCAGTGGCTC AATCCTTCTG ACAAGTCTCT TCCTGGGCCC CCAGGGTGT  
 61601 CACAATATCC TTTGAAATCT GGGGGGAGGA AGCCATGCCC CCATATCTCT  
 61651 TGTATTCTTC ATGCCTGCAA AATTGATGCC ACTTGAATGT CACAAAGGTC  
 61701 AACTTGTAAT TTCTAGAGCA GTGGCACTAG CTATACCTGA AGCTGTGGCT  
 61751 GGGTTGGCAG AGGAGTGCTA CGCTGGAATG TGGGGAACAG AGACCTCAGG  
 61801 AGGCCCTGGG AAGCAAGCCT GTGGAGGGTG CCCTGGGCTC ATTTCTTGAA  
 61851 ACCATTCTGC TCTCCTATGC CTGTGGGTGT ATGATGCAAG GAGCAGCCTT  
 61901 GAAGTTCTCT GAAATACCTT CAAGATCTGT CTTCTATTGT CTTGCTTATC  
 61951 CCTTCTGTCT AATAATCTT CTTAACAATA AGATTGCTGG ACCACATCTT  
 62001 TGGTTTCTCT TCCTGAACAC ACTTTTTTCT TCTTTTTTTT TTTTTTTTTT  
 62051 TTTTTTTTGA GACAAAGTCT CGCTCTGTCA GCCAGGCTGG AGTGCAGTGG  
 62101 CATGATCTGA GCTCACTGCA ACCTCCGTCT CCTGGGCTCA AGCAATTCTC  
 62151 CTACCTCAGC CTCTCAAGTA GCTGGGATTA CAGGCACGTG CCACCACGGC  
 62201 CTGGCTAATT TTTGTATTTT TAGTAGAGAC GGGGTTTCAC CGTGTGGCCA  
 62251 GGCTGGTCTC GAATCCTGA CCTGAGGTAA TCCACCACCC TTGGCCTCCC  
 62301 AAAATGTTGG GATTACAGGC ATGAACCACT GCATCCAGCC ACTTTTTCAC  
 62351 TCTTTATGTG GCCAGCCTGA GAATTTTCCA GGTCTTTCCA CTTTGCTACC  
 62401 CTTTTGATTA TGAGTTTCAT CTGTAAGTCA CTTTTTCCTC TCTCACTACT  
 62451 TAATGTAAGT GGTTAAAAGT AGCCATATAA TAGCCTGAAT ACTTTGCTGA  
 62501 CACTTAGATA TTTCTCTAC CATATATTCT AATTCATTGC TCTTAAGTTC  
 62551 TACAGTCCAT AGAGCCCTAG GGCATGAACA CAATGTAGCC AAGTTCTTTA  
 62601 CAACCTTATA GTCTTTACTC CAGTTTCCAA TACCTGTTC TTCAAGTTCA  
 62651 TTTGAGACCT TGTCAGAGTG GCCTTTACTG TCCACATATC TGTGAACATT  
 62701 CTGGTCATGA CCATTTAGAT AATCTCTGAG AAGTTCTAGA CTATCCCTAG  
 62751 TTTTCTCTTC TGCACCTTCA CCAGAATTAC CCTAAATCCT CCATTCATGG  
 62801 CAATATAGGC TTTTCTTAGC ATTCACTTTT TTGGAACAAT TTTGGAACAA  
 62851 TTCACAAAAT TGTTCCATTG TCTAGTTCCA AAAGCTGCTT CAACATTTTC  
 62901 AGGTATTTGT ATAGCAGTAG CCCCACCTTT TGTGTCAATT TTCTCTTAGT  
 62951 CCATTTTCTG TTACTATAAC TAAATACCTG ATAGTGGGTA ACGTATAAAG

63001 AAAAGAGGTT TGTTTTGGCT CACAATTCTG GAGGTTGAGA AGTCCAAGAT  
63051 CAGGCAGCCA CATCTGGGTG ACTTCTGGTG AGGGCTTCAT GCTGCATCAT  
63101 GACATAATAT AGTAGGGAAG TGGGTGGGTG TGAAAAGGGG AAAACTCAGG  
63151 GAGAAGCCTT GCTTTATAAT AACACACTCT TGTAAC TAAT TCAGTCCTGT  
63201 GAGAGCAAGG ACTCACTCAC TTCCTCGAGA ATTAATCCAG TCCTGCGAGA  
63251 GTGGCATGAA TCCCTCTTAG TGACCTAATC GCCTCTTAAA GACTCTACCC  
63301 CCAACACTGC CACACCAGGG ACCAGATCTC ACGCTGGAAT CTTGGGGAGC  
63351 ACTCTCAAAC CATATATGGG AGCTCTTTTT GTCCAGAAGT CAGGCTAGCT  
63401 CTAAGACCTA ACCCTCTACT CACATGGTTG ATATTTCTGG TGACCAGCCC  
63451 CTGTCCTGAG CCATCTCATC TCTTAATGTA AACTCAGGTG TGATATAAGG  
63501 GTGTGATATA AGGTGTGATA AATAATAAAG ATACTCCTAT TACTCCAAGG  
63551 ATTTTCTCCC TTTCAGAAAC CAGGGACAAA TACCAGTCAA ATTCTTTATT  
63601 ATACCACTGG GTCTCCACTG CCCAAAAGCT CAGAGTATTT ACCAAGCTCT  
63651 CTATACTTTG ACTGGGCCAG AATTTACCT ACTCAGTGCT ATACAACCTG  
63701 TAAAATCTCT GTTGAGCTCT TAGCTCCCA AATATTTCCA GGCCCTGAA  
63751 ATCTTGCTGC TGTTCTTACA GCTTAGGATT TAGTCCGGA CCAAAGAGAA  
63801 ACCCTATTCA GGCTTTTGGG GCTCCTTTTC TGTAAGTTGC TCTATCCTG  
63851 AGCTCAATTC CAGTCTCAGA AATCTCAGAC TTTGACATCT TTTCTTCTG  
63901 CCTAGTAAGA CTGCTGCTCT CTACTTGAGC TCCATTTCCC TGTGACAAGG  
63951 TTTGGGCCGT GAACCCATTA AAAACTACCC TCAGGAAGAA AACGGGGGTG  
64001 AGTGTGGTGC TCATCTCGTG TGTTTTCTTT CTTTCAAGAA TAGCAGCACA  
64051 TGATGCCTGC CTCCAGGGCC TAGAAAGAAT TGTTTTACTG TTCTAGTCCA  
64101 GCTGTACGT GATTTTAAAG TCAAACAACA GCTATTTTAT TGAAGCCAGA  
64151 ACCATAAGTT GCCAATGTTT CCTCAGTATA GAACCTTTATA CCATCAAATA  
64201 TCTTTGAATA AAATTTTAAA ATGGAGACAT TTCTGAAAA AAAATAAAG  
64251 ATTTTAAACA CACCTTCATT TGTGGCAATT TTAATGGATG TTTTCCAACA  
64301 GGAAGAATGG AAAGTCTAAG ATATAAGAAG CAATAATGAG TAAAGAAAGT  
64351 GGCAATATTT GGGTTAATAT TTGGGAATTA ATTTAATTTT AATTAATTAA  
64401 TTAAAAGTGG GAATATTTGT GTTAATCTAA GTATTAATTG CTTGAAATAA  
64451 TAATGTCTCA TAACCTTTAAA AGTTTGGCAG AAAATATGTG AAAATATAGC  
64501 AGATCAGTCA AAAAAGGACA ACTTCAAAT TTTGTACTGA AATCCTTGTA  
64551 TAGTTGAGAA AAAGAAAAAA GATACCTATA AACTTAATTT TGATAAGTAT  
64601 AGAGGGTAAA AATGTCTAAG GAAACCACTA ACAAAGCATA ACTTTCAAGT  
64651 TTAGTAGTAG ACAATAAATG AAGTGAGAAA AATATTCAAA AAATCTAGGA  
64701 AGAATTCAAG GGAGAAAATG AAAAATAGAA AAGGCAGAAA AAATAGAAAA  
64751 TACAAAATAT TAGCTTTAAA TTCAAGTATA TTAGTAATTA CAATAAATGT  
64801 AAACAAACCA AATGTTCCAA TTGAAAGATA ATAGTTATCA GAATAGAAAA  
64851 AAAAGGCCCA GCTATTTGAC AAACAAACAA ACATATCTAA AATACAAGGA  
64901 TAAAGGCTGA AAATAAAGA TGAAAAACAA TATTCCAGAA AAATAGCAGA  
64951 AAGAGCCTGG TATAGGTATA ATAAAGTGAA ACACAATATA ATAGAGGCAT  
65001 AAAGCATAAC TAGAGAGTAA GAGGACCACT AAGTAATAAT AGATTAAATT  
65051 CACCAGGAAG ATAATACTA TTCCAAGTAT GTATTTACCG AGTAAGATCA  
65101 GATTAACATG TAAAGTAAAA ATTGACAGAC TTATAAGGAG AAATAGATAA  
65151 GCTCATGATC ACAATGGGAG CTATTACATA ATCTTAAATA ATTCCATTAG  
65201 AAGAGAAGAA AGAGGCTAGG CATGGTGGCT CATGCCTGTA ATCCCACTC  
65251 TTTGGGAGGC TGAGGTGGGA TGATTGCTTG AGGCCAGGAG TTGGAGACAA  
65301 GCCTGAGCAA CACAGTGGGA CCCTGTCTCT ACAAAAAGAT AAAAAAATTA  
65351 ACCAGGCATG ATAGCACACA CCTGAAGTCC CAGCTACTCA GGAGGCTGAG  
65401 GTGGGAGGAT CACTTGAGCC AAGGAGTTG AAGCTGCAGT GAGCTCTGAT  
65451 GGCACCACTG CACTCCAGCC TGGTGGCAGA GCAAGGAAAA GAAAAAATAA  
65501 GACAGGACCA AAGTTGATGA GTTAAACATC TCCACCTCAC AATGTTAGGA  
65551 AAAGAGTAGC AGAGTAAACC CAAATAAAGT TGAAGGAAGG AAGTAATAAA  
65601 GAACAATAAT AAAAAGGAAT GGATAAAATT GAAAAAATAA AAGTACAACA  
65651 GAAAGGTTCA ACAAAGCCAA AGGCTGATTT TTGAAAGAAC CAATAAATCT  
65701 AACAAAAC TAAGTCAAGT AATAAAGGAA AGAGGAGAGA GGGAGGAGGA  
65751 GGGAAATAAT ACACATATCA GAAATGAAAA GAAGATGTAA TAATTAAAGC  
65801 TGCAGAAATC AAAACAATAA TAGAATCTTA TTTACCAAT ATATTGAAA  
65851 GCTCTGCTGG TCAAATTTCC TGAAAAAATA ATTTGTCCAA ACTCACTTCA  
65901 GTAGAAATAA AAAACCTAAT CAGTCTTAGC ATCATTCAG AAATATAATC  
65951 AGATTCTTAA CTGGAATCT TCCACAAAAG AATATGTCAG ATCCAGATAT  
66001 TTTACCAGTG GGTACTAACA AATTTTCCAA CAACAACAAT TTTCACTCA  
66051 TATGAACCTAC TCCGAATCC AGAAAAAGTG GGTATATTGA TGAGAATAAC  
66101 ATAAACTTGA CACCAAAACC TGGTAAGAAT GTTTTTTTAA ATGCCAGTTT

FIGURE 3, page 21 of 188

66151 GTACATAAAT ACAAAGTCC TAAGCAAAAA TTAGCAAAC ATATTAGCA  
66201 GTCTATTAAT AAAAGATAAA CCATAACAAT TTGGATTTAT CTCAAACAT  
66251 ATTTGTTTGC CACTAGAAGT CTCTTGATGT ATTTACCAC AGAACAATTT  
66301 TAAGTGGATA AGTCATATAA TCATCTCAAT AGATATAAGA AAAGTATTTT  
66351 AAAAATCTAA TATCCATTCA TTTATTAGTG TAAGAAAAAA TTCTTACACT  
66401 AGGAGAACCA AATAGAAGGG AACTTCTTTA ACTTCAAACA CCATTTTTTT  
66451 TAAACCAGTA GCAAATAATA AATGTATTTA GTATATAATG CGAGCAAGGT  
66501 TTTTCACTGT TAGGAAAGGG TTTTACAGAT ATGGAAAGTG GGAAGTCTAG  
66551 AATGGTACAT TTGTTTTTCA ATGGGAGTTG GAAGTATCAG TTAAGTATTG  
66601 CTTGAAGTTA AGAGTGTGTG TGTGTGTGTG TGTGTGTCTG TAACATTCTC  
66651 TAGCTCTGTG TGCTGAGAAG GCACAGAAGC AGTGATACTC CAGTAGCAAT  
66701 GTACACCCCT AGCAGCCAGG TTTTCCACTG AAGGGAAC TAAGCTTCCTTG  
66751 AGAAGTGGGG AAATGGAGCA GAAAAAGTAT ACAATGAATC TGGAAGGTTA  
66801 TTTGGTGTCA GAAAAATAAA GCAGCGCTCA AAACATCATG GGGACTTGTC  
66851 AAAACGATAC AATAGTCAAC TTAAAGGACT CATGCTGGCC ACATCTGGAC  
66901 AATTTGAGCT TTAAAAAGAA AAAACATGT TAATGGATTT GTGGCATATT  
66951 GTATGTTTCA AAGCTAGCCA CAACAGTATC TTCCATTTC CATATTCTTC  
67001 TTACAATGTG TCTTTGACCC TCCTCTTGTT GAGAGGCAGG GTCTATGTCC  
67051 CCTCGTCTTG AACCTGGGGA CTTTGTGGA AGTGATGCTG TAGGACTTCG  
67101 AGGCCAAATC GTAGATGACA GGTAGCTTC CACCATGCTG GCTGGAACAC  
67151 TCATGCTGGA GCCTAAGCCA CCATGTCAAC TGTCTAACTG TCCTGAGGTC  
67201 CCTGTGCAAA CTAGTCCATG TGAAGAACC ACATGGAAG AGCCTGAGAC  
67251 AGCCTGAAA GAGAAGATG CCACATCAGC CCCCACAGC TTCAGCTACC  
67301 ATCTGACAAC AACTGTGTGA GAGGCTTCTG AGCTGAATCC ACCTGGCTGA  
67351 ACCCTCCCCA GATATCTGAC CTACAGAAAT ATCGAGAAAT AATGCAACGC  
67401 TTGTGTTGT TTTAAGTCAC TACGTTTTGT GGCAATTCTT TGCATAGCAA  
67451 TAGGTAATCA TAATAGATTG GGGACAAAAA TATGAGATGA CACCATGACA  
67501 AAACCTCAAA ACACCTGACT TTGGTTTTGG TGGCAGGAGG CATTGAGACT  
67551 GCTGGTGAAA GCTTGCAGGG GCTGTGAGAG CGGGCTGGCA GAGTCTGAG  
67601 GAGGCTCTCA GTGGCACTT AAAGTCAAGG GAGGAAAATG TTCCAAGAAG  
67651 TTGGATGGAA GAACCTGGA TGTGGGGTAG TGGGTGGTTT AATAATATTG  
67701 TCACCTCTGG TAATGCAGTA AGATAGGAAA TATGCTAAAT AAACCTGATG  
67751 ATTCCACTAA AGAGGCTATC AGACAGAACT TAGAAAGTAC CACCAGATTA  
67801 GTTTTTTTGT TTGTTTTTTT CTTTCTTTT TTTTTTTTTT TTTTGCCTAT  
67851 GTTAAACAT GAGAGGGAGA GGTGAGCTGG AGGACAACT GTTAAATATA  
67901 AAGGAGCCAA GACTCACCAG GCTTGAAAGT CAAACTTGTT CCATTTCCAG  
67951 CCTCTCAAAG GTGGTAAAAA GTTGCTAAAT TAAGAAAAAG TTTCAGGTCA  
68001 AAAAGAAAAT CCATGAGGGG TACCTATAAG GTTCTTTGTT AAAAACCTCA  
68051 GAAATATTCA AGGTATCATA GACTCTTCCA TCCAGGAAAA AAAGGAGGAC  
68101 TTTTACAGAT CTTAAGGTGT GCCTTGCTGC TGAACAACAG GGCTTCTAGC  
68151 ATCTTAAGAG CATTGTCCCA TAGGGAGCCC AGGAAATGTT AGGGTTTATC  
68201 TTGAAGAGAT TTGTGAGTTT GGCTTTTCTT GGAAAAAGTA TGTATTAGGG  
68251 TTCTCTGCAG AACAGAAATC AACAGAGAGA GAGAGAGAA GAATGAGTGC  
68301 GTGTGTGTGT GTGTGTGTAT GTGTGTGTTT AAAAATGTGT TTATTTTAA  
68351 GAATTATCTC TTGCAATTGT GGAGGCTTGG CAAATCCAGA ATCTGATGGG  
68401 GTAAGCTGGC AGGCTGGAGA CCCAGGGAAG GGTGTCAGTT TGAATCTAAA  
68451 GGCCATGTCT GCTAGCAGAA TTCCTTCTTG CTTGGGGGAG GTCCATTTTT  
68501 GTTCTATTAA GGCCTTCAAC TGATTGGATG AGACTCACCC ACACATATGA  
68551 AGATAATCTG CTTTACTCAA AGTGTGCTA TTAAATGTT TACCTCATCA  
68601 AAGAAAAAAA AAAAACCTTC ACAGAAACAT CCAGTAAAT GTTTGATGAA  
68651 ATATTTGGGC TCTATGACCC AGCCAAGATG ACACACTAAT CACCACAGAG  
68701 TACATTGTAA ACTGATACAC TAAAAGAATG CAAGTTTGTT TTTTCAAAAA  
68751 TTATACAAGC TTAACTGTA AGTGATAGAG ACAGTGCAA ATGAAGAGGT  
68801 CCCTGAATGT CCTAACTTCT ACAAGAAGGA AGCAGGCTGA GAAAACTACT  
68851 TAACATGGGT TACTTTGTAT GGAAAGGAAG AAAGACTCAA AAGGGTGGAG  
68901 CCAAGAGCCC TGGAGAATTA TTCCTGGAGT CGACCGGAGC CCTAATCAAG  
68951 GGACTAGAAA CAAGTACTGG CTAAATGCA GAAGTGTAT GCATCAGCAC  
69001 CTGATTGTGC CTCACATTTT CTCCCTTTT AAATGAAAAT ATCTGTAGAA  
69051 GTTGTCTGT GCCGCCCCAC TGTATGCAT GGGCTGTGG AGTGAGTGT  
69101 TACAGGTCTT CAGATTGAGA GGAATGGTGT GCGAGGAGCT GAATCTAGG  
69151 AACCTCACCT GAGAAGTCTT GTCTGAACCT GGACCTGATT TAGATAACAG  
69201 ATAACCTGAT TTCGATCCTG GATTTTGTGC TGCTGCACTA ATAGATTG  
69251 GGATATTAGA GAGAGGATTA TTGCATATGG GAGGATGTG AATTGTGCC

69301 AGAGGGTGGG TCATAGCAGA TTGATTTTCC AAAGATGGCA GCAGCAATAT  
 69351 CTCTCATCAC GCATATCCTT ATAACATGAA TTTGACCTTT CTTCCATGTA  
 69401 GAGATGGGAT CTATTTCCCC TCTTGAATCT GGGCAGGTTG TAACTGTGGC  
 69451 AGATGTGATT CTATATGACT TCTAAAGCTT TGTCATACAA ATGACAAATC  
 69501 ATCACCTTGC TGGCTAGATT GCTCACGGTG GATCCCCAAA CCACCATATA  
 69551 AACAGTGCCC TGAGGTTACC ATCTTGTAAG GGAGCCCAAG TGAGCCAACA  
 69601 TGTAGAGACC ACGTGGAGAT GCTCTGAGGC CACACGAAGA GAAAGAGAGA  
 69651 CGCTCAACAA GCCCCAGCT GGCTAGCCCC CCGCTCTCCC AGCTCTGGCT  
 69701 GTTGTCTGAC TCTAACCACA TGAGGGACCC AGAGCCAGAA TCACTTAGCT  
 69751 GAGTCCATCC CAAATTCCCA ACCCAGAGAA ATCATGAAAG ATAATAAAAT  
 69801 AAGTGTGTG TCAAATCCCC AGGCTTTTGA ATGGTTACAC AACAAAACAT  
 69851 AACTGGAAAA TAATTATAAC AACTGAATA AAATAGGAGT GCATGAGTCC  
 69901 CTACATACAT AAATGAATAA ATAAGTAGAT GGACATAAAG GAAAGCTCTT  
 69951 CCTGGTAGAA TGCCAGATAA GAAATATAGA AGGAAAGATG GAGTTAAAAA  
 70001 AAAAAAGTCT CAGCAGATAC GGAAAACCAA CAGTCAAAGT TTGATGAGGA  
 70051 ACAGAATATT TACATATTCT GCAAGTGTTC CTCCACACAT TACTTTTTAA  
 70101 TTACAAAAGC TGGATATAAC CTTAACCAG CAATTAAAGC TAGCATACC  
 70151 AATATTGGGA TGAATCAACA TCATATGCCT CTTGATGTGA TATACTAAGA  
 70201 AGGACAAAGT GTCAATTCTT TGGTATTCCT GTGAAAAATT TATAACTTGA  
 70251 ATCTTAGGAG GAAACATCAA ACAATCCAT GTTGAGGGAC ATTCTACAAA  
 70301 ATAACCTGCC TGTACCCTTC AAAAAATATTA AGGTCAAGAG ACAGAAAGGC  
 70351 TGAGGAACCTG TTCCAGATAA AATGAGACTA AAGAGACATA ACAACTAAAT  
 70401 GCAATCTGTG ATCTGGGTT CGAACCTGGA CTAGGAAAAA AAAATAGATA  
 70451 TAAAGACATT ATTGGGATAA TTGACAAAAA TTGAATATGG ACTGTGGATT  
 70501 AGGTAAAGC ATCATAACAA TGCTGATTTC TACAGTTATA CTGTAGGAGG  
 70551 CTGTGTTGAC CTCAGGAAAT ATACGCTTTA GGATTAAAGG CACATGGGGC  
 70601 TTTAGCTTGT TCTCAAATGG TCCCCCCAA AATACATGTA TGTACTGTGT  
 70651 TTATATATGT ATAAATATAT ACATGTATGC CTATATATTT ATATATATAT  
 70701 GTGTGTACAT ATAGATACAC ACACACTATA TATGTGTGTG TCTCTGTGTG  
 70751 TGTGTGTGTG TGTGTATATA TATATATATG TGAGAGAGAA ATGATAAGCA  
 70801 AATGGGGCAA AATGCTAAAT CTGAGATAAA GTATAGGAGA TCCTTATACT  
 70851 ATTCTTGCTA TTTTCTGTG AGTTTGAAAT GATATCAAAA TAAACATGAG  
 70901 CAGGATGAGA GCACCTGCTA TCTCACTTCT ATTTAATATT GCACTGGAGG  
 70951 TCCTAGCTAG TGCAGTAAGG CAAGAGAAAG AAATAAACAA TATGAAAATT  
 71001 TGAAAGAGAG AAACAAAACCT GTGATTATTC ACAAATGATA TGGTTGTGTA  
 71051 GAAAAGCCAA ATGCTCTGTG AATACATTAC TAGGATAACT AATATCTTTT  
 71101 AATAAGGTTG TTAATATACAA AATCAACATG CAAAATGTAA TTGCTTATCT  
 71151 GTATAACAGT AACAAAGAGA AAATGTAATT TAAAATTGAT ACCACTACTG  
 71201 GCATCAAAAA TATAAGCAA GAATGAATAT AACTAAAATG TGTAAGGTCC  
 71251 TCATGGAGAA AAAATTATGA AACTTTGTTG AAGGGGCTAA TTAATTAATA  
 71301 AGAAGGTCAG TATTGTAAAG GAGTTTATTC TCCCCCAAAA TGAACAGTGT  
 71351 ATTAACCTGT TATGAAAGT ATATGAATGA GTGTGTGTAA TTTGACAAGC  
 71401 AGGTTCTATA ATTTATGTG AAACCAAAG ACCAGAAATA ATGATGGCCA  
 71451 CCCTAAAGAA ATAGCACAA AGACTGCTGG TGAGAGCAGA AGCTTGTGCA  
 71501 ACTCTTTTGG GAAACAGTTT GGCTTTATTT AATACAGCTG AAAATGCCGT  
 71551 ACTCTAGGAA CCAGACACCC CACTCCCAGG AGCAACCTCT CATAGAATCT  
 71601 TTTCCATATT TGCACCTGGA GACATGAACA AGAAAGTTCT AGCACCTCTG  
 71651 TTCATAATTT AAAATTATAA ACAATTTTAA GATCTAGCAA CAGAGGAATG  
 71701 TATAAATTCT AAATTGTGAT ATAGTCTACA GTGATAAAGA ATATAGCAAT  
 71751 TATCCTATAA TAATATATAG AATATAAAGA GATAGATCTG GAATACTATA  
 71801 CCCAGAGTGA AATGAATGA ATTACAGTTA CATGTAATAA AATTGATGAG  
 71851 TCTCAGGCAC ATAATATTTG GCAAAAAGAA GCAATGACAA AAACAAGTAA  
 71901 AATTATTATA CATAAATTAT ACATGGATAA TCACTGTATT GTTATTTTAT  
 71951 ATGCCACATA TACTTTATAA CTACTTTGCT TCTATTCATA AGTTAATTTT  
 72001 AAATAATTTT AAAGAAATTT TAAATATTTA TTATGGCATT GATTATAATA  
 72051 ATAAAGTACC TTTAAATGTC CCCCAAAAGT AATTGACTGA AATAATGACA  
 72101 ATACAATCAT GCCATAGCAT ACTAAACAAA TATTTAAAC AATGTTACAC  
 72151 CTTTACAAAT ATTTTGTGTA AATAGAAAGT TGTTCACAAT ATGCTGTTAA  
 72201 GGGAGGAGGA AAGCAAGTTC TAAAAATAGA ATGTACTGTA GGTTCAGT  
 72251 TTCTAATCTG AATAAATAAA TAAATGAGAT AAATATGGAA GAATATAGAC  
 72301 TAAAAATTGA GGTATATTTT TGACTAGTCA GTTGAATAA TTTTCTTTT  
 72351 CTTGTTGTT ATCTGTATTT TCTAATATTT TCCCACAATA AACAGATACT  
 72401 ACTTTTATAA TGGGGGTAAA ATCTGATGCT AACCAGAGAC CAGTGCATGC

FIGURE 3, page 23 of 188

72451 CTTTCCGTC TGTGCTCAGT TCATTCATTC ATTCACCTGC TTATTCACCA  
 72501 TTCCGTGTGT ATTTGCAGAG GATCTACTGT GTGTGAGAGG CCCTCTGCTT  
 72551 GGTGATAGCG AAGAAAGAT GAACAAGGCA TTGTCCCTAC TCTGGAGCAG  
 72601 TTCAGTCTCT CAGTCTCTGT GTAAATAATA ACCTAGTGCC ATATGCACTA  
 72651 TTATGACACA AAACAACGAC ACTCATTAGT ATGAGAATGT TTACTTCCTC  
 72701 TTCACTTCCT TCAGTCCACC AAAGAAAATC CCATAATTTT TAACCCAATT  
 72751 TCTATCCCCC TTGTCCCTAAT CTACTTGGAC TGCTATAACA AAATGTCATA  
 72801 GACTGGGTGG CTTAAGCAAC AGACATTTGT TCTCTGCCGA GAACAGCTCG  
 72851 GTCGGGGAGA CCCTAACCTA GCAGCGCTAG AAGAATTAAA GACACACACA  
 72901 CAGAAATATA GAGGTGTGAA GTGGGAAATC AGGGGTCTCA CAGCCTTCAG  
 72951 AGCTGAGAGC CCTGAACAGA GATTTACCCA CGTATTTATT AACAGCAAAAC  
 73001 CAGTCATTAG CATGGTTTCT ATAGATGTTA AATTAACATA AAGTATCCCT  
 73051 TAAGGGAAAC GAAGGGACGG GCAGAATTAA TTGCAGCAGG AACATGCCCT  
 73101 TAAGACACAG ATGGCTCAGG CTTTGTGTTG TGGCTTAAGA ATGCCTTTAA  
 73151 GCGGTTTTCC GCCCTGGGCG GGCCAGGTGT TCCTTGCCCT CATTCCCTTA  
 73201 AACCCACAAC CTTCAGCTT GGGCGTTATG GCCATTATGG ACATGTTACA  
 73251 TTGCTGCAGA GATTTTCTTA ATGGCCAGTT TTGGGGCCAG TTTATGGCCA  
 73301 GATTTTGGGG GGCTTGCTCC CAACAGTTCT CACAGTTTTG AAGGCTGCAA  
 73351 AGTCCAAGAT CAGGATGCTG ACCAGCTTGA TTTCTGGTGA GGGTGCTCTA  
 73401 CCTGGCTTGT AGATAGCTGT CTGCTTGCTC TGTCTTCACA TGGTAGAGAG  
 73451 AGGGAGAGAG TTCTCTGTGC CTCTTCTTAT GAGGCCAACC ATCCTGTCAG  
 73501 ATAACCCCCC TCCTTACGAC CACAGTTAAC CTTAATTACC TTCTTGAAAG  
 73551 TCTTAATGCC AAATATAGTC ACATTGGGGA TTAGAATTTT AACATACGAA  
 73601 TTTTAGGCGG GGCACAATTC AGTTCATAGC ACCCTTTTTT CCTTCTTTTC  
 73651 TCATTAAGAG GCAGGTTGGC TCACATATTA AAAGGATGAA AAGGAGGTTG  
 73701 CATGAAAAAA AGGAAGGGAG TTGCAGAGAA GCTGGGAGTG AAGAGATTAA  
 73751 GACAATTTTG GGAGAGATGC TGGGGACAGC TGGGGATGTG ATGCTGGGGA  
 73801 CAGCTGGGCG TGTGAGGGAA CTGGGGGAGA AAAGAAGGGA TGTTATCAAA  
 73851 TGCTCCATG AATTAGGTAT TTGTATCCTA GTAACCATT TTTGAAAAAG  
 73901 CAAGGAAGA ATTTGTGTTG TTAATAATT TTTTGACCTT GGGGCTATGT  
 73951 TCCTTCAACC ACATTATTCT TCTGAGGCTG GACCTTATGA GTTCTGAATT  
 74001 TAATGGTTCC ACAATAATAG TCATCATGGG CACATGGAGG GCAGAGCTAT  
 74051 CTGAACTTC ATCACTAGGC ATAAAAGTAA CAGGAATAGT GTGAAGAAAT  
 74101 ACATCAGAAT ATAAGGAATT CATTACTGTA GTTAAATGTA TTAGAAAAAG  
 74151 TCCACTTTTT ATCCTGGAAC TCAGTTTGCC CCGTGCCCTG ACTTGTCCTA  
 74201 GAGTTAGAAC CAAATCTAG AAGGCAGAGA AGGCCTCGAC TCACTGGAAA  
 74251 ACAGCAGAGG GAATTTCTTA CTGACCTTTT CTTAAACTCA AGTGACAGAA  
 74301 AAATAATGTG CATCTGATAG TTTAGGATGA TTTGTTAGCT TTAACATGGA  
 74351 GTCTCCACTA TTTTCATAGG GACTCAATTT ACTTATTTGG TTTTTTTTTT  
 74401 TTACAATCAG GTTTTTTTTA ATACAACCAG TTTATTTTCC AGGTGATGGG  
 74451 TTCTTTGACT TCCTTGAGTC CAGAACTATA AGCCAATAAC TTTCTGTATA  
 74501 TTATAAATTA GTCTCAGATA ATTCTGTTAT AGTAGACAAA AACAGATGAA  
 74551 GACAAGTAGG TGCTGCAGGA GAATGTTAGG CCCAATGTAC AGTATTAGGC  
 74601 CTGAGGTTTC AGGAGGAGAT GTAGATGAGG AGCACTGCAG GAGGAGCACT  
 74651 GCAGCAGGAG CAAGGACTCG GGGGAGCCAG AGCTGTGGGA GCACCTGGAG  
 74701 AGAGAAGTTG GGGCAGGAAA GGGTGATGGG GCAGGATGAA GACTCCTCAG  
 74751 GGGCACTTAG ATCCACCACC CACTCTTCTT TATTGAGGCT CACAGTCCAT  
 74801 CTGCTCTGGG GTGGGCACTC AGGGTGACTC ATTTCCAATG TGGGATGAGG  
 74851 TTGCTGATGA AGCGAATGTT TGTTCCGCTC CTCACTAGGT TTTGCTGAAG  
 74901 GTCTGTCTCG CCCAAAGCAG GGTGGAGATA ACTGTGAACA TGGAGAGCCT  
 74951 GGCTTAGTTT TCCTATTGCT GCTGTAACAA ATTACCACGG ACTGGGTGGC  
 75001 TTAAGTATAA ACTTACTGGC CAGGCATGGT GGCTCACGCC TGTAATCCCA  
 75051 GCACTTTGGG AGGCTGAGGT GGGCGGATTG CTTGAGGCCA GGAGTTCAAG  
 75101 ACCAGCCTGG CCAACATGGC AAAACCCCTG CTCTACTAAA AATACAAAAA  
 75151 AATAGCTGGG CATGTTGCTA CAAGCCTGTA GTCCTAGCTA CTTAGAAGGC  
 75201 TGAGATGGGA GAATCACCTG ATTCCAGGGA GTTTGAGGCT ATAGTGAGCA  
 75251 GAGATCACAT CACTTTACTC CAGCCCGGAC AGCAGAGGGA GGCCCTGTCT  
 75301 CAAACAAGCA AACAAACAAA ACCCAACAAA TACCCAGAAA CTTATTATCT  
 75351 CACTTCTGGA AGTCAGAAGT TGAGATCAGT TTCCTAAGC TAAATCTAC  
 75401 ATCATGTAGA TTGTGAAAGC TACATCATGA CCATGAGGAT TATTTTGGT  
 75451 AGCTCTAATT CCATGATAAA GCCCACAAGT CCCCTCTGTT TCTTGCAATA  
 75501 ACTCGTAGAA TCCACGAAGT GCTGTTTGTG GCTGAGCAGG AATCCCTGGA  
 75551 ACTGTGCCCT AGAAGTTTCA CAGCTGAGAC AGGGTCTCTG GGGTTCATTT

FIGURE 3, page 24 of 188



75601 CTGGTTGGAT GCTTGGGGTT TGGAGATCAC CTGCCCTGGC TGTGTTTTGT  
 75651 CCTCTGAATG GTTTTTCTCC AGGTACTCCC TTGACCAAAG GGGAGACTCC  
 75701 AGGGCCCTTG ACCAAAGGGG AGACTCAGGA TTGGTACTCT AGGACTCTGG  
 75751 CTGGCCAGCC CTACTGATGT TGTAAAGGA GGCTCTGACC TTGGTTATCA  
 75801 GACATTGCCC CTACTGATGT TGTAAAGGA GGCTCTGACC TTGGTTATCA  
 75851 GAGCAAATCC AGCGTATGTT TACCGTGCAA TGTACATTTT TGTCTGTG  
 75901 TGTTTCAGAGA ATCAGAAGTC CTTATGGGGT AGATAAGGCC TGGTTCTGAC  
 75951 GCCCAGAGTC CTGTTTATGA GTGGCTCATG AGAGGGGCCT CTGTTCTGTC  
 76001 TAGCAGGGTC TTCCTTGGGA GCTCTTAAGT AACCAGTGTC CTGGGTTAAC  
 76051 CGGAATACCT CCTCCCTGG CTTGTCTTA CAATAGAGGC TTTGCCGTGT  
 76101 GCCTACACAA CCAAAAAGGA AGCTGTTTCT ATTCCCAATC AGATCTGGAG  
 76151 ATGATATTGA ACATAATTCT CTATGTTAGG AATGTAGAAA ATACACAGCA  
 76201 TGGAGGGGAT AATGTGGGGC ATTTGTGGT GACTGTAGAT TCCTGGAAGT  
 76251 TATTTATAAT AGTTGGCCTA TGGGGCTGCC AACAAAGTGCA GAGGCAGTTC  
 76301 TTCTTTCTAC ATGCTCTAAG GGAGAATCTA TTTCTTGCA CTTTCTAGTT  
 76351 TCTGGAGGTC ACCTGCCTTC TTGGCTTGTG GCGGCACATC ACTCTGACGT  
 76401 CTACTTGTCT TCATGTCTCC TCTCCGACT GTGACCTCC  
 76451 TGCTCTCTT TTAGAAGGAC CTGTGATTGT ATTGAGCCCT CCTGGATCTT  
 76501 GCAGGATAAT TTTTCCATCC AAGATCCTTA CCTCACTCAC TTCTGTAAAG  
 76551 TCCGTTTTGC AGTGAAGAG AACATATGTA TAGGTACCAG GCCTAGGATG  
 76601 TGGATATCTG TGGGGCCGTT ATTCCATCTA TTGTGAGGCA TGCCCTGTTC  
 76651 CATCCCTGAC CTGGAGTGTA CTTGGTTTTT CTTCCACAG TAAAGGCATG  
 76701 CAGATTATTG AAGGGTTGTG TCCTACGGGG ATGGATGCCA GGAATGAGCT  
 76751 CACTGGAATG CTTTCAGTAT GGTTCTTTG AGAATATGAC TGTGAGCGAG  
 76801 GAGTCTGATG ATTTCCGCCC TATCACCAAA CCTGTGGTGC TGTAAACTAA  
 76851 AGCTTGACTG GCAATTGGAG AAGGATCATC TTTCCCTTTC TACTTTCTCA  
 76901 TTTCACACTG ATTTATTGCA AGTTGTAGCT CACAGTCTTA GCAAATGAAA  
 76951 CAATTTGTTG CTCACTCCAT CGCTGTTTCT TCCCCAGAGC TGAGAGGCCT  
 77001 GCTTAGAAAA ATGTTCTTTT AGGGAACAAA TGCAGTGTGG AGGGGCTTGG  
 77051 CTGCTGCCAG TGTGGAGGGA TCCACACTCC ACACTCAGCT CTGGCCCTCA  
 77101 GTCTTTCCAG GGGATATTCC ACGGCAGAAG TAGGACGCTT AAGGCCCTAT  
 77151 GAGTCATGGG TAAGAATAAT CCTGAACTC ATGATGTGGG TCCCTCTCTG  
 77201 ACAAGGTGAC CACAGAGATT AGGGCCAAAG TCAGGGCCCC AGACATCTCA  
 77251 CTTCTTCCCC TTTCATGCCT CACTCATACC ACTGGGGGAC GGGGTCAGCA  
 77301 CATTCTTCCA AAGAGGTGCC TTGTAACAAT TGCTTTAAAG GAACATGTTG  
 77351 ACAAGAAGGT TGCTAAGATT TCGATGGAAA GATGTTGAAA GAAACCGTGT  
 77401 GAAGAGAGCA TCCCATCAAT GATCAGCCAG TGAGACACAA GGAGGGGTCA  
 77451 GTCCGTGTGT CTGAGCCCAT CCTTTTCTGC ATTGCTCTC CCGGCAAAGA  
 77501 AGAATATCGG CCCTATCCAG GGCCGAGCCT CATCTTCAGT CCCACCTTCT  
 77551 AGATGTGAGT CTGGCCCATG TCCAGTCTGG GCACAGCCTA CTGTGTGTTG  
 77601 GGCTTGCGCA GCATTTGGCA CTGGGGCAAG ATCCCATATC AGAGTCTGTG  
 77651 GGTGTTAGAG GGAAGACCA CGGAGAGCCC ACTCAGGGCC TGTGTGAGTC  
 77701 TGAGTCTCTG GCGGCTCA GCCTGCCAGG TCTCTGCACT GGGGTGTGGG  
 77751 GCCTGGGTAT AGCCCTTACT TAGGGGTTTC TTGGCCCTCC TCTGTCAATG  
 77801 TGCCTTGTFT ATCTTGGGGC TCCATGGTGA AGGGTCCCTG TTGTCGGGGC  
 77851 AGGGTCCCTG GCCATAGGTC CACCTAAAAG TGGCACAGCC ACACAGCAAT  
 77901 TTCTAGCTGG AGGAGATGAG GTTCTCTTTC TAGCTAACT CATATGTTCT  
 77951 CCAGGACACA TGCAAGATAT TATGCCTGTG TCTTATCTTC TTCTCACCA  
 78001 CAATCTCCTT GAAGGCAGAA ACTAGATTG CTTCAATTAA GCTTATTTAC  
 78051 TTGTCTTTGT CTTCAAGGCA CTTAGGCTAG TGTGAGCAC ACAATGCATG  
 78101 TCACGTGACT GAGGATTACA CGTGGGCCCT GAGAACTGCT CCATTGTGAA  
 78151 TGTCCCTGAG CAGGCAGCGA AGGTGCTGAG GTGGGCACCT GGAGTCCAGC  
 78201 AAGGTGTTTT TAACCTGCTG TAACCTGAA TTCCAGCATG AGTGGGGAGG  
 78251 CATTTCTGCG GCTCCTAACG GTGCTATCCA GGGCCGAGT GCTCTGGCT  
 78301 CATGCTGCAG CTTCAGAAGA TGCTGATTG CTAGTTTTTC CTGAACTGTT  
 78351 TTTTCTTCTC TCTGAGATCA GTGATTCCCA CCGTCGGTTT TACAGCACCC  
 78401 CAGGTGTCTC CCAGCTGTCT CAAGGGCTGG CACAGAAGTC TCAAAACCAT  
 78451 TTGCTTCAAA CAAAAACAA ATACACAGAA TACAGCAGTT TTAGCTGAAT  
 78501 TTGGAGGCAG GAAAGAAAAA AAGTCTAACA AAATCCAAAC AAGCAAATTG  
 78551 GGTGTACAC TCCAAAAAGC TGGACTCGCT GCCTTAGAAA AGAGAAATGG  
 78601 TTACACAAAG TCACGTCTTC ATGTACTGGT TTGGATCCGT GTTCTGAGGA  
 78651 CTGCTGCACA AATCCAATCA GACAGGACGC TTAACAAAAA AAAAACCCGA  
 78701 AACATTTTAT TGCTTTATTT TCCTTTCCCA TAGAAAATAA ATATTACACA

78751 GATGAATAGC AATATACAAA AAACCATTCA ACAGAGTTCT GAACCAGCAA  
 78801 CTCTGAAGGG TGAGTCTTCA ACGAAGCAGA ACTTTACCAT TTGCTGAGCC  
 78851 TCTGTTTAGG AGAGGGTTTA GAACCAGAAA TGCCCTGTCT GGGTTGGGGA  
 78901 TCTTTTAGCT CCTTGATCAG GCACCAGGGA GGCAGTGTG TCTAATTATC  
 78951 CTCATCTATA AAATGGAGAT GATAATAATC ATACCTCATA AAGTTAGGAG  
 79001 AATTCAATAA ATTAATAATT ATGAAAATCT TAAAACAGAG GTTGGTGCAT  
 79051 AGTAAGCATT ATGTCAGTGT GTGCTCAAGA AAGCATTGGG AGCCTGCAAT  
 79101 GTACCAGGCC TGGTGCTAGC TTGGTAGGTT CCTGGGCTGA CTGTTTGTGT  
 79151 CTGGGTTGGT TTTTGTCTCA TAGGGAAGAC AGAGAAGGAG ACACCTGAAT  
 79201 AAAATACCTT GTGATGAATG CTAGTTCCCC ACAGAGTCAT GTGAGGATTC  
 79251 TTAATTAATA CATGGATTCT GGTGCTGGCA TTTGTTGTTA ATATTTTGGG  
 79301 CAAGTCATTT ATCTTTTCTG AGCCTTTGGG TATTCACAGG GAATGCTAGG  
 79351 TTCCAATAAC AAATAGTCTC CATGATTTC A GTGGCTTCAC ACAATGGACA  
 79401 TTTACTTCTT GCTCCAGGAA CAATTCGAG CAGGTGTTCA GATTGTCAAG  
 79451 GCAGCTGTCT TCCACATGGC CATTCTGTGA TCCAGGCTGA CAATGGCTTC  
 79501 CAAGATTACC CTGGGGATCA GCATCCAGG CAGCCGGAGC AAGAGCATGG  
 79551 AGGCTCCCC ATGCTGTGG GACGTTCTCA TGGGCCAGAC CTGGAGGTGG  
 79601 CACTGCTCAC TGCCATGCAC ATTCTCATGG AGGAGACTTA ATCAGATGGC  
 79651 CACATCTAAT GGCAAGAGAG GCTGGAGATA GCGAACAGCT CTGTGTCCAA  
 79701 ACAAGAACAG GTTTTACTAG ACATCTCAAT TTGTTTATTT CTAAATATG  
 79751 AGGTGGTATC CCTGCCATGC TGACTTACAC GGGTTGTTGG GGGAAACATG  
 79801 CACTATAATG GATATCAAGT CACCTGGGAT GGAAGGAGCT GTGTGGACAA  
 79851 GGGAGTTGTT GGTGGGAAC AGTGGCCTTG GCCTGCAGAA GAGTGGGGCA  
 79901 GGGGTTCTGC TGGTGTCTCA GCAGCACAAC TCAATTCAAA AAGTGTTTAC  
 79951 AGAGGAGCGT GCCAGGCTCT GCCCTGGGTG CTAGGGATGT AGTCATCCCA  
 80001 TGACAAGCTC AGGGAGGAGG AATCACAGTT CAGCGTGACA TGTAGCATGA  
 80051 GAGCTTGCAT GTGGTGTCTGA ATCCAGACGC GGTGGTCAGG ACATCCTTCC  
 80101 CAAGGACAGG GCATCTAACC AGAGAACAGA AGGAGATGGC CCAGTGGGGC  
 80151 AGGTGGGGG AGGGGCCAGG TGGAGGGAGG GTGTTTAAAG CAGAGAAAAT  
 80201 TCCATGAGAG CAAGAGAGCA TGGCTTGAGT TAGGAACAAA AACTCAATAT  
 80251 GAGCAGATGT TAAATGGAGG AGAAGAAGCC AAGAGTTACC AGAAAGGTTG  
 80301 GCAGAGCTTG TAGGCCATAG TGAGGCCTAA TGGGCAGCTC ACCTTTCTGT  
 80351 GGGAAATCCC CCTTTTGTTA AAGGTGACTT ATTTCTTAGA GCCATAATAG  
 80401 TGTGTCTTTG AAATTGTTAC GGAACAGCA AGAGGGGACA TGGCATTTTA  
 80451 CCTGCAACCA CATTCCACCT GTTCCACTGT GTACACCTGA ACCAAATCCC  
 80501 TGAATGATA ACATTATCA AGGTTATTCT GTGGTGTCTG GGCTAACCTT  
 80551 GATGACCAGG TTCAACCTCC TTCCCAACAT AGGCATCTGG CTGGAGGAG  
 80601 CTAAATTAAT AAGATTTGTG TCTTAATAAC TTGCAGGTGA GTGCCAGTG  
 80651 TTCCTTGGGG GTGGGAAGCC AAGCAAGGCC AAGGCTGCCA TGTGGGGTGG  
 80701 CTGACCCCTG GATATCAGGG GGGTTACTTG GACTCTTTTG TCTGGGCCCCA  
 80751 GAATTGACAT AGCTGTCTGG GCCAGGCACC CTGCTGGTTA TCACTCCATA  
 80801 GCTCAGTCTG TGTGTGATGT GTCTTTTGCA CCTTCACCTT CATGTTTCCA  
 80851 AATAAGGAAA AGTGCAATG AGAGAAGGGG AGAATATTTC TATAATGTGA  
 80901 ATGACTCTTG CTACTCTGAG TTCCCTCAGC TGTTTCAGTT ATAATTCTTA  
 80951 TAGGATCAGT TCAGGCCTGC ATTTCCAGGG ATGATGCTTG GCTGTTTAAAC  
 81001 AGCATTTTAT GTCTGGAATG CTTATAACAT CGGTCAGTTA TGCAGTGAAT  
 81051 GCACTTATGG GTGTGTGTGT GTGTGTGTGT GTGTGTGTGT ACACGTGCAC  
 81101 ATCTCAGAGC AAAAGAGATC ACAACTGAGA GGCTGAGAGA ACAGACACTG  
 81151 GCTAGCCCTG CCTGATTGG GGGTGAACCC TGGTCTTCAT GAGGAGTCAG  
 81201 AAGCAGTTTC TAGTGAAAGT AGCATGTCTC TTTGAGGCAT AAAGCTTCAC  
 81251 CAGTCTTCTT GGAACCTTGA CTAATTTTGT ATTCTCTGGT TCCATGAGCC  
 81301 AAGCATTATA CTAAATATA CCCCTCAATT TGCAGAGAAG TGGAAAGGTGT  
 81351 TCAAACACAG AATCAAAATA AAGGATAATT TTCCATCTTC TGCTGAAACC  
 81401 TCTCATTTTC CAGCAATGTA GAAACAAAAC AAGAGACGAG AGGACATGTG  
 81451 GGGACTGAGA ATGAGTGCAT TAGCAGTCTT TTGGAGATAC CCACACAGAC  
 81501 CTGATGAGCT TCTCAGGACA GAGGGCTGCA CTCAGGATTC ATCCTCATCC  
 81551 ACAGTGATTG TGGCTGTGTG GACTTACACA ACTGGCAGCT TGCTGCCAGT  
 81601 TGCCGCTCTG TTGGGTAGGA AAAAGGAGGA CTTGGAAACT GCCTCCGGAG  
 81651 AGCCTTTTGG AGGTGAAGGA AGTTGGCTGG CAACTCTGTC CACTCAAGCT  
 81701 CAAAACCTCA GCCCGTTTAC CAGCTCCTGT TGGTCCAAGT CTGAATTGTC  
 81751 CAGGTTGGCC GACAAGTTCT GCTCCTTCTC CTGTTTCGCA TTCATCCCAT  
 81801 CTCCTCCTGC TACTCCCATG TGGTCAAAGT CCTCATCCCC AGCTCCCTGC  
 81851 AAAGGCCTCC CCATGAGCCT CCCTGACCCT GTCTGCATAG CGCCACTTCA

FIGURE 3, page 26 of 188

81901 CAACTCGTCC GCAAATGTTA TCTTCTCACC ACTGGCCAGC TCAGTTGGGG  
81951 TTGGAGTGTG TGTGATAAGC TAATCCACGT GGAGATCTAA ATGGCCTCCA  
82001 GGGGTCAATTA GGAACCTCA CTTTTTTTCT GCCCAAATTT CAAGACCATC  
82051 CGTGGGGGAT CTTTACCCTA CCTCTCCAAT AGGAGTCGCA CCCTAACCCA  
82101 GCAAGTCCCC TTCGTTCTGG CTGTACATTT GGGCTTTCCC TATTTGTGAA  
82151 TGGATTCTCC TCTTCTCCA AGACCCAGCT GAGATCTCAT CTCTGCAAAG  
82201 ACTTCTCAGT TCCCTCCTGT TCACCTTCTT TCCCTCAACA CTCAAACCCC  
82251 ACCCCTCATT GTCCAGTGCT TGATAATGAG GCTACCCCTT TGGTTTCATG  
82301 AATTGCTTCA TCTCCCCAGC TGTATAGTGA AGAGAATAAA AATAGCCACA  
82351 GTGTATTGAT CATTTACCGT AGGCCTCATA AATATCATGG CATTTAGTAT  
82401 GTCCAATAAC TGTGTGTGAT AAGTATCAAT GTCTCATTGT AGTTAGAAAA  
82451 TCACAGTGCT AGGTATCAAA GCTGTTTCATC TGTTAAAGTC GTGCTTTCCT  
82501 CAGGGCCCTC AGTGTGTGTG TCCCGTGAGA GGTGCTCAGT AGACAGTTGA  
82551 GAGAATAACA AGCTGCTCCG TCTCCCCCAT GACCCTAGCA CCCAGCACAG  
82601 TGCTGAGCAT GTAATACATG CTCAACTAAT ATGTCTTTGA CAGACATATT  
82651 TGAAGGCATA AAGAGCTAGG AGAATATTGA CAGTCCCAC TGGCTGATGG  
82701 AGTAAACCAG GGCCTCAGGA GTCACTCTAG AAGTCCAGT TCTGGTCCGA  
82751 GTCCTGCACT GGTGAGCTGA GGGACCTCGG GTCCTGCTCA CCCCAGACT  
82801 CAATTTCTTC ATTTGCATGA CAAGGGCTTG TGCACAGGTT CTGTGAACTC  
82851 TGGAAATCTT GATGCTTTTA CTCATTCCCT GAAGAGGTTA ATTAGGACGA  
82901 AGTGCTCTTT AACTGGCAAT TACACTGCTG CGATATAGCT TGTTTAGTGA  
82951 GGCCGGCATC ATTGCCAAGG CCAGGACGGT TTCTGATGAT CATTTGCCAG  
83001 TCTCAGGAG ACAGAGACCG TGAGGAGACT GCTTAAGATG AATAAGAAAC  
83051 TCCCCCACT CACCATCAAA TGAGAAAGCT ATGGATCCAG AGCTGGGGAA  
83101 CACCACTGGG CAGGATGGTT TCAATGCCCC TAATTTAGCT TGCTCTAATT  
83151 CTCCTAAGC AGCTCTTTCT CAGTGGGAAA CAAAGAAGCT GCCTTTGAGT  
83201 GGGAACTCTG TGTATCCTTG TGAGGTAGAA GTCAGGCACA GGCTAACCCAG  
83251 ACATGGACTT GGGCAGTGCA GGGGGAAACA ACCCAGCCCT CAACAAGCAT  
83301 CACGCTTGCG TTGGCCAGCT CTGTTTGGGG TGGAAATGTG GTGATAAGCG  
83351 AATTGACGTG GAGATCTAAA TGACTGCCAA GGGTCATTG CATTTCTAAC  
83401 CAAAGGGATA CATAATTAAT GGTAAGCTCT GAGACATCAA ACTGACATAT  
83451 CGACTGTGGG CCTGTTTTGC CAGAACAGCG GAAAGGCTGG GGCAACCCGTC  
83501 TGCTGGGAAG ACTCCATGTA ACAGGGTTAA AAAGGTAAAG TTTCAGAGGA  
83551 CTTTCTGATC CATGAAGTTA GTGGTGCATG TGTCTGTTCA GGGACTCCTC  
83601 ATCTAAAGCA TTTACAGACA TATTAGCAAG ATTAGGTGAC TCCAAAGGGC  
83651 TGTGAGGAGG ACTGAGTACA GTGAGGCCAA ATTCAGTCTT GAAACCTAAC  
83701 ATCTGCCAGT GCATCTGAGT GGGTGCCAG TGGGTGGCTT CACTCACTAG  
83751 CTGGGCCAGG CAGCGGGATG GCTGCCTTTT GTGTGCAGAG GCCCATGGGG  
83801 GCTGTCTGTT GGTGTGTGATT TTCCTGGCTT TAGCGCTATA CGTTTGAATC  
83851 ACTGCAGTAT TGTACAACCC ACCCAGGGGC GGGGTGGGGG GTGCATTCTT  
83901 GGAGGGCCCT CTATGCACCT GTTAGTATTG CAAGTACGGG TCCAAAGAGA  
83951 CGCAGCTTGG AAGAAGCACA CGTTCGTGGG TGCCCCCTGTC TACAGCAGGC  
84001 TTCTCTGCGC GAAGTTGTTT TAGCCCTCTG TTCTGCAAGT TACAGCATCT  
84051 TGAATGAGGC AAAGTGACAC ACGGGCAAAT GGTGTGTATT CCCTACAAAC  
84101 TCCTCAGAGT TGACACCGCT CTCGCCTTTC TTCTTGCTTT GCCAGAGGCT  
84151 GTGACTCTGG CTCTTCACTC TTCAGTCATC ACAAAGCCTT TTCCCTTTAT  
84201 CATGTCAGAC CTTGGAAAAC CCACAGTCAT GAAAAATGATT TATCTTCCTA  
84251 AATTGTCAGT GATCTCCCAT TAGGCTTAGG ATAAAATCCA ATTTCTTCCC  
84301 AGGCCTCCAA GGGCTTGTGT GATCTCACCT CTGCCTGCCT GTCTCCGTTT  
84351 AAGCCCGTCC ATCTCTCTCT CCAGCTTCCC ATGCTCCAGA CACGCTGACC  
84401 TGTCTCCTT CTGCCCCCTCA AGCAGGACAC ACCTGCTCCC ACCCTGGGCC  
84451 TGTGCACATG CTGTGCTGTC CCCTCTCCCT GAGCGGCTCC CCTCGGATCT  
84501 TTTGTGACTG CTGCTGTCTC ATCTGGTGTG TCCAGATGT TAACCTCCCA  
84551 GAGAGACCAC CACTGACGTT CCTGTCACAA GGACACCCGT CTTCCCTGCC  
84601 CACCTGTGAC TTTGTTTTAG CTTCTTCACA GCAATTGTGA TTATGGGAAA  
84651 TTGTCTTATT TATTGTTTAA TGTCTGTACA GTGGACTAGG ATGTCGGCTC  
84701 TAAGACAAAA ATGTCCTCTC AGACTTGGA TTTTAAATG TGTTCAAAT  
84751 TTACAATTGT AATAAATGGG TAACATAATA AATAATAAAT TGTATATTAG  
84801 GTCCCTGGAC TGCTGTTGAA TGAATGAATG GCAACAATGA TAGGAGTAGT  
84851 TGCTGTTTAT TGAGTACCTG TTATGTGTCA GGCTCCACAT TTAATCATCA  
84901 CACCAAACCC AAGTGACCAG TGCTGTCAAC CTCACCTTAC ATATAAAAAC  
84951 ATATTAATAA AAACCAAGAT TCACAAATGT TACATGATTT TCACTTTTGT  
85001 AATAGCGCTA ACAGCCTGGA TTCAAGCCCA GGTCTGACTG GTTCAGAAAC

FIGURE 3, page 27 of 188

85051 CCATGCCCTT TCTCTAAAGA AGAAGTAGGT AACTTGCTAT GTCATCCACT  
 85101 ATCTGGTGGT TTTCCCTGCT GGCTGGTTTT CCCTTCTCT CCCACTCTGC  
 85151 ACCCAGCAG CTCCAGGCAT GGATGCCAGT CCATTCAGAT TTCTCCTATG  
 85201 TCTGTCTCTGT GTTAGTCTAC TTGGGCTGCC ATGACAAAGT ATTGCAGACT  
 85251 GGGTGGCTTC AACACCGGAA GTTTATTTTC TCACGGTCCT GGAGGCTGGA  
 85301 AGTCTGAGCC AAGGTACTGG GAGGATTGGT GAGGCCTCTC TCCTGGGCTT  
 85351 GCACACAGCT ACCTTCTTGC TGTGTCTCTA CATGGCCTTT CCTCTGCACG  
 85401 CATGCCGGGA GAGAGACGGC TGGCGTCTCT TCTTATAAGG ACACCAGTCC  
 85451 TATCAGATTT GAGCCCTGCC CTCCTGACCT CATTTTACGT TAATTACCTC  
 85501 CTTGAGAATT CTAACCTCAA ATATAGTAAC ACTGGGGTTA GGATTTTAAC  
 85551 ATGAATGTGG GGTAGGGGGG ACTCGGGGGT GGCAGGGGCA CAATTCAGTC  
 85601 CCTTACACAT TCTGTGGAAC CACTTTTTTC GATGCCTTAA TTATACCCAA  
 85651 CTGATTAAAA TACAAAAGTA ATATTAACAG TTCCCAATCA GTGCTTGAGG  
 85701 GCTAGAAAAC ATTGAAATAT GTGATCCCTG CCCCCGAGGC ACTTAGCGTT  
 85751 TCAAATCTCG GACTCATTGA GTTGTGTGCT TTATTAATGA TAATTGGGGC  
 85801 TTTTAGAATG AATGCTGGAT GCCCGTGTG AAGCCCCCTCA GCCCTGAAGG  
 85851 GCCACTGGGG CAGACACATG CTAAGAACGT GTCAATTGGA TAATCAATTA  
 85901 GCTTAATTTA AAAAGTGGCA GCCACTGAGA TAGGAAATGT GAAAGATGCT  
 85951 ACTGAAAATT GTTTAGTCTG CAAGTCACAT CAGAGAGATG TCTGCATCAG  
 86001 CATTATATCA TGATTTGGCC TCCAGAATTT AGGCAGAATG TGAGAAAGCT  
 86051 GGAGAAGGTC CAGAAATAAA CAACAGGATG AATTAAGGGA GAGAAAATAA  
 86101 TGCTATGAGA AAAGGTGATA AGAGTTGCAT TTTTATTTT TTAATCCCA  
 86151 ATGCCCAAGA GATTGTGGCA CATAGGTAAT TACTATCTT TAGGGTCGTT  
 86201 AAAGGAAGAA TGCTGACCAA CTGTTAATA TTTCTTGGG AAATTTAATA  
 86251 GGAGTCATGG GCTCAAGTCC AGCATAAGAG AAGTGGAGGG GGCAAAGAAG  
 86301 CAATCATTTT GATTTTGTAG GTGATTAAAT GCTGAATTAA TTCCAGCAA  
 86351 GGAATGCA CTATCGGTGG TCCTGTCTTG ACAGCTATTT GTCTGGAATG  
 86401 GTTCATGTGC ATAGACTCAA GCCTCTCCCA CCTGGTAGAA TTCTTGCTCC  
 86451 TCATAGATAA TTTTCCCCAC AGCTATATGT CACTGTGGGG AACTCTGAGG  
 86501 GCCTGGGGAT CTATACCTTT ATTCTGCTTT GCACAGTGTC TCCTGAAGTT  
 86551 TCCACATCTT TGGCACTTAG AGAGCTTTAC ATCATCTAAT TCTGCCTTCT  
 86601 GGCATCTCTT CTCAATTGCA TCACAGTGCT CTTGGGACAA CCCTGCAGTT  
 86651 TATAAATCCA TCTACCTGGA GGCAGGAGAT CAAATCAGAT GACCTGTGAA  
 86701 GCCCCTTTGT GGTGAAAACA TCTAGCGGCT TTCTTACTTA GAAATTAAAG  
 86751 ATGGGTGCAG TGTCATGGCT GCTCACTCTG CCTCTCCATG AGAGGAAACT  
 86801 AAATAAAAAA TCTCACAAGA CATTAAATAGC CAAATAAAGA GTTAATAGGG  
 86851 TTCGTCTCTG GGAGTTAATT TAGAAAGAGT TGATAGGATA ATGGGCAATA  
 86901 AAATAGAAAA GGAAATAATG TTTATTGAGA ATCATTTCTT CTGTTAAAT  
 86951 GTATTAGGTT CACAAAGGAG TTGCTATTTT GGAATCATTC ATTTGATGAT  
 87001 TCCTCAAAGA TTTCTGAGAG CCAACTAGAT GCCAGGCACT CTCCCCGGTG  
 87051 CTGAAGATAG GGTGGCAGGC AGTACAAAGC TCCTGCCTTG GTGAGCTTGC  
 87101 AAGTCCTCAT GAATTAGGAT TTCCAACCTG AAGTGACAAA AATGCAACCC  
 87151 AAAGTGCTTT AAGCCAGGAG AAAAGGATCT GTAAGTGGGA AGACTAGTGA  
 87201 TAACTGGTTC CATATTATG CTGGATTGGA TTCAGGGCTC AGCAGGGAAG  
 87251 CAAGTGACAG CCTGCCCCAAC TGCTCAGCTG AATCTCTGAG GTTTCCTCTT  
 87301 GCTGGACCAG CTTGGGTCTT GGGACCATCC CTGAACACCA GTTATATAGA  
 87351 GAAGGAAAGA CTGCTGTACC TAAGGTTAAG TGGAGACATG TTTTCCCTCT  
 87401 GCTGCTGGGG ATGGGGGGTC AGCTTCAACC TAAGAGTGGG GCTGGGGTCA  
 87451 TTTTGCTAAA GCAAGCTCAG GACATGCTTG CCCTAGGAAG GAACAGTGAA  
 87501 TGCTTGATGA AAAAAAAT TTCTTTAAGG TAGTTACTTT TTAAGTTTTT  
 87551 TAAACAAACT TCAGAAAGTT TAATCCACAC AGGGACTTCG AACCCACATC  
 87601 TTTCTTTACA TGGTGTCTCT TCAGGAAGCA GCAGGAGAAA TATTTGCCTA  
 87651 GTCCCGCTG CCAGAACAC CTTCTTCCTC CACATCAGCT TTTCCAGTGA  
 87701 TTCAGACCCA CCCCTCCATC CCATCAGAAC CCATCTAGCC CACACCTCCT  
 87751 TCTCAGTGCC TAGCTTTGTG CTGCCCCAAA TGCTACATCA TTCTATATTA  
 87801 TGCACAGTGA GAAATATATG TATGCAGAA ACACACACAT ACCTGTGTCT  
 87851 GGATGATATA TGTGACTTTT CATAAAAGCA ACCCTGCTCT TAAAAACCCC  
 87901 TTCTGTGAAC ACTCTCCACC CTCCCCTGCC TTCTGACAGA TCTCAGGCAA  
 87951 AGATTACACT TGCTGACAGC AGGAACCCAC CAGCCCCCTA ATTTACACT  
 88001 TAGCACTTG CCATTGGAAG AATGCACCAT TTTTCTTCC TGAAGTGCTA  
 88051 CACTCCAGGG CAGGTCCTTT GTGTCTATG AAAGTGCTGT CCATCACTGG  
 88101 CTGCTTCTC TCTGGCCCT CCCACCCCA CCCCACGCC AAATATCTCT  
 88151 GGGGCGAGCC CTGGGGTTCC CATCTTGGTG CTCCCCACAG CCCTCCGTGG

88201 TGTGCTCTGG ATGGTTGAGT GGAATGGCTT TCTCGAGATG AAGAGAAGAG  
 88251 GCCTGCAGCA TGGAAGGGAA GGAGTGGGCA CAGGGCCGTC TCTACTGCTC  
 88301 ACTGCACCTC CTCCAGTGTC CTGTGACAAA TTCTGAGAGC TCTCCACCCA  
 88351 TCCACTCCAC ACCTTCTTCC CCAAACCTGT GGTTTAAAGT ACATAAGCAA  
 88401 TGCAGCCACA TTGCAAAACA AGAAAATGAG GGAAGGAGAA GGGAGGGTCC  
 88451 TGAGAAAGGA GAAGAAAAGA GGAAGAAAAG CAGAAGAAAA ATTGAGAAAA  
 88501 GAAATACGGA AACCCACCTG CAATTGCCAC CTGCAGGTTC TTTTCATGTG  
 88551 CATCTGTTTT ATGTTGTTAC TCTTTCAATA CAGAGTTGCC CACGGTCTAC  
 88601 TCTAGCTACT TGTTTTATCC AAGTAATTTT ATGTAAAAAA TTTACCCTCA  
 88651 ATCTTCTGTA GCTCGCCTTG CTAGGGTGAC ACCTACATCT CCTGCCTAAG  
 88701 TATTGTCATT AGACCCAAAA TGAAATGCAT GTGACTTGCA GGGTCAAAGG  
 88751 CTCAGTGCCC TTGCTCTCCG ATTAGAAGAT CTTAGGATGA CTTATTTTGA  
 88801 TTTCTTGTTT CTGATTGTGC CTCTTAGGGC AGAAATGGTT CTGCTAAAC  
 88851 AACAAAATTC TCTATAAAAG GCATCTTGCT GGGGAAGGAG GGATAATACC  
 88901 TGGTTGGAAG AGTACAGGTA GTTATTGCAT GAAAAATACC AAAGGGGCCC  
 88951 AGGCACCATC ATTACTGCTA TTGCCCTTCT CGGAAAGGCT GACGTGTTGA  
 89001 AATCAACTGT GGCCATCCCG GCTTTCCTTT ATGTTGCTGC TTTGGAGCGA  
 89051 GCAGACAGAA AGAAGCGTGC ACGTTGGTGA TTGGCGGCAT GACAGCCTCA  
 89101 AGGCACTAAC CCAGCACCTG CTTCTGAGG CCAGCTCAGC ACCTCACAAG  
 89151 GTGCCAGGTG CTGGGATAGG AACAGAAGGG ACTTGGTCCC TGTCTGAGAG  
 89201 GTGTTTCATCT GGGAGGAAGC CAGCCATATG TGTGACTTCT AGTGCCCAAT  
 89251 TAGTCAGTGT ACATCCAGAA AGCAGGGGCG CATTCCAGCT TATAGAAGAG  
 89301 AAGCCCTGGG TGGGAAATGT GTTGTGTGTT TTTACAACAG TCAGAACAAA  
 89351 TGGTGGCCTT TGGAAAGTAC CATGAGCAAT GTTAGATTAT AAGGACAAGC  
 89401 AATGGAATGT TAAGGGTCAG AGGCAGGAGG GGACCCCTC CTTGCATGGA  
 89451 GCACCTTGTA CTCTGCCTGA CAAGTGAGCC TCAAAACAGA GAGCTTGGTT  
 89501 TTACAAAAGT TTTTCTTCC CTTCAGGTCT CATACTTTTA TTTGTAAAGT  
 89551 GGTGCTAATA ATAGTCTTTC TTCTTTCACT GGATTGATGA AAGACTCAAG  
 89601 TACTAACCAC ATACAAAGAT TATTGTTAAT TTAATGCATT CCATGGGGGG  
 89651 TCAGGGAATA AATATCCTTT GTAATTTGGT TTTAAGAACG ATTTTAAATT  
 89701 TTTCCCCCAA TTACAAAATG GATAAATTTG CATTGTAGCC AATTTGGAAA  
 89751 TATAGCAAAG CACATAAAAA TATTTTTTAA TTATCATCCA GACATTAAAA  
 89801 ACCATTACCA TTGGCATGTA TCTCCCAACC AAGCTTTTTT CTATGCACGG  
 89851 GTTAAGAAAA ACAAGCATTC AGCATCTCTG TTCTTATATC CTTGTCCATA  
 89901 TACTCCTAAT TTTGTCCTTA ACATAGAGTC TAGTAGTAAA ATTGTTGGAG  
 89951 TGTAGAGCAG AATATATGCA GAGTTTCAGA TCTTTAGAAC TATAGTGTC  
 90001 AACTGCCATT TTGAAAGGTT ATTCAATTCA CATCCAGAA ATTGAAGATA  
 90051 ATGCTGCCCC CTTCCCCACC TGTCTTTTGC TGGGTGCTAA CATTTCTAAA  
 90101 CATCTTTACT AATTTGATAG TATAAAAATG GACTTTCATT GTTTTAATTA  
 90151 GCCTTTCTTT GATTATTGGT GATGAACATT TTTTTCATGT GTTTATTCAC  
 90201 CAGTTGTATT GATTTCTCTG TAGTTTGACT ACTCCTTGTC TTTTCTCTAT  
 90251 TGATGTATTT CTCTTATTA TTGATTTGTA AAATAACACT TTTATATATT  
 90301 AAAGACATTG ACTTTTCAGC AAACATTTTG CAAGTATTTT CCCAATTTGT  
 90351 CGTTTGTCTT TTGTTTATGG TAGGCCTGAT AAACAGAAGG TTTGTAATGT  
 90401 TTATTTAGTC AAAAATGTTT AACTTTTTTC CTTTATGGTA TCAGCATTCG  
 90451 TTTATATGCA TATAAAGTGC TTTCCAATTT GGCATGGTTA ATTTTGTATG  
 90501 TCCACTTGGC TAGGCCATAG TGCCTAAATA TTTGGTCAGA CATTATTCTA  
 90551 GATATTTCTG TGAAGATACT TTTCAGATGA GATTGACGTT TAAATTACTA  
 90601 GACTTTGAGT AAAGCAGATT ACCCTCCATA ATGTGGGTGG ACCTCACCCA  
 90651 GTCAGTGGAA GGTCTTAGTA GAAAAAAGAC TTAGTCTCCC CAAAGAAGAG  
 90701 ATAATTCTGC CAGTAGACTG CTTTGGACTT GAATGGTAAC ATCAGCTCTT  
 90751 TTCTGGGACT TCAGCCTGCC AGCCTACCTT GCAGATTTTG GACTTGAGTG  
 90801 GTAACATCAA CTCTTTTCTG GGACTTTAGC CTGCCAGCCT ACCCTGCAGA  
 90851 TTTTGGACTT GCCAGCCTCT GTAATCACAT GAGCCAATTC CTTAAAAAAG  
 90901 ATCTATTTCT CCCTCTCTCT CAATCACCTT ACACACACAC ACACACACAC  
 90951 ACACACACAA TTAGTTCTAT TTCTCTATAG AACTCTAATA ATATACAGCC  
 91001 AAAAAATTATG TAAATGTTTA TTTATATTTT CTTTATAGTAT TATTATGCTT  
 91051 TCAGTTTGTG TGTGTGTGTG TGTGTGTGTG TGTGTGTGTG TGTGGTGTGT  
 91101 GTGTGTGTGC ATATATATAT ATATATTTTT TTTTTTTTTT TTTTTTTTTT  
 91151 TTGAGATGGA GTCTCACTCT GTCGCCCAGG CTGGAATGCA TGGGTATGAT  
 91201 CTCGGCTTAA TGCAACCTCC ACCTCCCAGG CTCAAGCAAT TCTTCTGCCT  
 91251 CAGCCTCCTG AGTAGCTGGG AATATAGGCA CCTGCCACTA TGCTCAGCTA  
 91301 ATTTTGTAT TTTTAGTAGA GAACAGGTTT CACCATGTTG GCCAGGCTGG

FIGURE 3, page 29 of 188

91351 TCTCAAACCTC CTGACCTCAG GTGATCCACC CACCTTGGCC TCCCAAAGTG  
 91401 CTGGGATTAC AGACATGTGC CACTGACCCT GGCCAGTTTG TACATTTTTT  
 91451 AGTCGGTTGA GAGTTCAATG TTTGCTATAA GGCCGATTTT TTTTTTTTTT  
 91501 GAGACAGGGT CTCACCTAT CTCCAGGCT GGAGTGCAGT GGTGCAATCA  
 91551 TGGCTTACTG TAGCCTCGAA TTCCTGGGAC CAAAGATCCT CTTGCCCTCAG  
 91601 TCTCCCAAAG TGCTGGGATT ATAGGAGCCC AGCCTCAAGG CAGAGAGGCA  
 91651 GAGATTGAT TTAATTATCT TCCATGTGGT TAACTAATTG TTCCAACACC  
 91701 ATAAATTTAA TGACATATCC TTTCTTTTTT TCCTTGAAAT GACACCCTAT  
 91751 TTACATGTAT CTTCCTAGAT TTTTAGTCTG TTGTTTTGAT CTGCCTGTTT  
 91801 CTGCTGCCAT ACCCCATTGT TTTGGTAACC TTAGTTTTAC AATGCACTTT  
 91851 AATGTTAGAG AAGTCAACAC CTCAGACTGC CTTTCTGAA TCTTTTTTTA  
 91901 GAAATGTTTT CCACATGAGT GAATTTGAAT AATTTTTGTT ATGTTCCCAA  
 91951 AAGAAATCCC ATTCACAATT TATTGGAATT GTGTTACTGT TATAGGGGAA  
 92001 TATGGAGAAA ATTTAAATCT TTACAATCCT GAATTTTCTT ATTCAGGGAC  
 92051 ACAGAGTCTC TCCGTTTACT CAACCTCCTT ATTTTTCTCA ATAAATTTCT  
 92101 GTCATTTTCT TCATAGGTGT TTTGCACATT TTATAGACAT TTTATATTTT  
 92151 TGGTTGCTTT TGGATTTTTT GTCATTATAA TTTCTGGTT TTGTGTATGT  
 92201 GTTTGTATTA ATTTATATTG TAAACAGTGC CTTACTAAAT CTCTTACAAA  
 92251 TTCTAATAGT AATTTTGTGA ACTGTAGATT TTTTCCAGA AAATATGATA  
 92301 ATTTTCTCCT CTCTTTTTCA ATGTTTTTTG ACTATTATCT TGTATTCTTG  
 92351 TCTAACTGCA GGGTCTAGAC CTCCAGGAA ACAAAGTCTT AGTACATAGT  
 92401 ACGTGAGCTT CTTTGTCTTA ATTCTAAAAG TAAAAGGATT GCTCCTAAGT  
 92451 GGTTCAATTA AATGATATTG GTAAATTATC ACTGAACCTT TAGAATAAGT  
 92501 CCTCCTTGGT CATGGCACGT TAGTCTTTCA AAAAAAAAT AGCGCTAGGT  
 92551 TTGATTTGGT ATTCTTTACT TAAGGTTTTT ATTTATTTAT TTTTGCATTA  
 92601 CTTTTCATGA GCTGTAGATT TTAGTTTTTA CATTTTATTT CTCATATGGT  
 92651 GGCTGATGCA CTTTGAAAAT GAGTTAAGAA ACTCAATTTT TTCAATATAC  
 92701 GGAATTGTTG AATATTGTTT GCCCTCCTAA GTACTTTGAT GTTATTACCA  
 92751 ACCTTGCTTT TTTGTCATTT GGTTTTTCTG ACATTCACCT TGCCAACAAA  
 92801 TATTTCTTGA GTGCATACTA TGTCTAAAT ACTAATTTTT ACTGGTTTAT  
 92851 CATTTAATCT ATATTTTTTG TATGTTTTGC TTTTTTTTAA AAAAAAAAG  
 92901 CAGGTGATAT TTGTTGAGCC AATCTGAGAA TTATTTATGT TATCACAGGA  
 92951 AGATTTAACC TATTTATAGT TATTATAATA TGTGTTATGA TCAGAATTGC  
 93001 TTCTTGACAG TTATTTTGT TTTCTGAATT ATGCTTTCTT TTTCTTTGTT  
 93051 TCCTGTATTG TACTCTATAA ACTGTTGTTA TTTTATTATC ATCTCTCAGT  
 93101 GCCTCATATA TTCCCTAATC TTAATCTCC CATAGGTTAC CTTTAAAAAT  
 93151 TTTGGAAGTT TTTTTTTTTT TCCTTTCTT TTAAGAGATG GGGGTCTCAC  
 93201 TTTGTTGCTC AGGCTGGAGT GCAGTGGTGT GATCATGGCT CATTCCAGCC  
 93251 CTGACCTCCT GACCTCAAGT GATCCTCCCA CCTCAGCCTC CCAAAGTGCT  
 93301 GGCATTACAG GTGTGAGCCA CCATGCCTAG CCCTGTACCA CTTCTTAGTT  
 93351 TCTATTATTA TTAGGAATTT GGAGCCAACC AATGAAAGAC TTTTGTAG  
 93401 TCTTTTCTTT CTAACCATG CTGACAATTT ATTCAGCTTA TTAACCAACA  
 93451 TTATAGCATT TTATAGATT TATCTGTTAT TTATTTGGTT GCATGGCTTA  
 93501 TCGGGGATTC TTCTATATTA TAGTTTCAGA TGTTAATTTT CTTTCTTAG  
 93551 GTTAATTATA TTAATGTTAC ATTTTCAAGC GATGTTTTTG AATGAAGAAT  
 93601 GCATGGGTGT TATATTGTCT TGAATACTGC ATGTCCAAGA ATACAAAGTA  
 93651 TTACTTTTAT ATAGTAAAGA CGAGCTCCTT TATTACTT CCTAAATAAA  
 93701 AGTACTTTCC CTTACAACCTA TGTAGACATT GGTCCATTAT CTTCCAGTAT  
 93751 TTTGTATTCC AGAATAAAAG TCTAAGGGAG GCCTGGTTTG TTTCTTTGT  
 93801 TTAATAAATA AATTGTTTTG TGGTTTCTG GCTAAAATGC TAGAACCCT  
 93851 TGTCCTTTGT CTTCAATATC CAAATGTTTA TTTGGGTAAG TGTAGTATCG  
 93901 ATTTCTTACC ATTTTTTCTT CTGGAACATG ATGAATGCTT TTAATCTATG  
 93951 CTTCACTCTT TAGGAACATT TCCCACACT ATGTCTTTGT CTTGATTATT  
 94001 TGTTCTAGCC TTGCTTCTG AAATGTCTG TGTGTAGTGG AAACCTCTATT  
 94051 GCCTGCCCTG CACATCTGCT CCTTTCTTC TCTGCACTCT GGGACAGCTT  
 94101 CTAAGGTTG TCCAACATG CATTGACTGA GTTTGTATC ATTTCACTTC  
 94151 TGCTCTTAC TGTTCTCTAT GTGGATGCTA ATTATGCAA TGCATTTTCC  
 94201 ACCTCTTGCA CTCCTTTTTT TAAGTCACCT CACTTCTCAT TTCTCATGT  
 94251 TTTTCTTTTA TCCTCTTCTC TCGAGCCTTT GATTCACCT CTTGTTTCTT  
 94301 CATCTGTTCC TCTTCTCTAG AGATTCCTCC TGTCTCCTT GAACCAACGG  
 94351 TTTATTATTA TTATTATTAT TATTATTATT ATTATTATTA TTATTATCAT  
 94401 TGAGACGGAG TCTTGCTCTT TAGCTCAGGC TGAACGCAG TGGCTCGATC  
 94451 TCGGCTCATT GCAAGCTCCG CTTCCCGGAT TCACGCCATT CTCTGCCTC

94501 AGCCTCTCGG TAGCTGGGAC TACAGGCGCC CACCACTACG CCTGGCTAAT  
 94551 TTTTGTGTAT TTTTAGTAGA GACGGGGTTT CACCGTGTTA GCCAGGATGG  
 94601 TCTCGATCTC CTGACCTCGT GATCCACCGG CCTTGGCCTC CCAAAGTTCT  
 94651 GGGATTACAG GCATGAGCCA CCGCGCCCGG CCCCAGACAGT TTATTTAATT  
 94701 CTCTTGAGGT GCCGAAGTTC TCTTACGTTT TCTTCTGAAT TCTAAAGTAG  
 94751 ATCATTCTCA GAGAGGACCC TTCAGGATAA TGTTCTGTTT GTCGCAATGT  
 94801 ACAGATTCTA CTCCCACCTC TATCCCCACT CCTTGTACC AGGCCTCATG  
 94851 TTGGGTTTAA ATCTCGTGTA CTTACCACTG AAAAAGAAGT GATCCATTCC  
 94901 CAGTCACTGC TGACCAATAG TCAGGATGTT TAGAAGCTTT TGTCTTGCC  
 94951 GTCTGTCCAT GTGGATGGCT GAAGACAGGT TTAATAGCAT CCAATTCCAT  
 95001 AGAATTGGAA TTGGAAGAAT TCTATAGGAA GAATCCACTT CATGCAGTTC  
 95051 CTCTTCCAGC CCCACTGGCT GCTGCTCTGC CCTGCTGAAC ACATGGATGG  
 95101 GCACAGGACA CACTGCAGTT CATAGTGTAT ACTGCTGCTG GGGTCTCTGC  
 95151 TCTTACCCAC TGTGTCGGTG TGAATTTTCAT GTATTCTGCTG TTGTCTTAGT  
 95201 GGTAACCATT CTCTCTGTG ACCAAAGAAT ACAATTCAAC GTTCTCTCTC  
 95251 ATATAGCAAT TAATAATATG CATATTTGTA AAAAGAAACA ATTCTGCCCT  
 95301 ATTGGAACAT ATATAGTGTG AATATAAGTA TACCAAGATA TTCCATGCTT  
 95351 ATAGTTTGGG GTTAGGCGTC ATCAAAGCAA AATGCCTGTT ACAGAAGAGG  
 95401 ATTAGCAAAG GCGCAGCTCT CTGGAGGAGG TCTGTGAGAT ACTAGAAAAT  
 95451 CTTATCCAGG CCGGGCACAG TGGCTCATGC CTGTAATCCC AGCACATTGG  
 95501 GAGGCTGAGG CGGGCTGATC ATTTGAGGTC AGGAGTTCAC GACCAGCCTG  
 95551 GCCAACATGG GGAACCCCCA TCTCTACTAA AAGTAATATA AAAATTAGCC  
 95601 AGGCATGGTA GCTCATGCCT GTAGTCCAG CTACTCAAGA GGCTAAGGCA  
 95651 TGAGAATCGC TTGAACCTGG AAAGTGGAGG TTGCAGTGAG CCAAGATCAC  
 95701 GCCACTGCAC TCCAGCCTGG GCGAGAGAGA GCAAACTGT CTCAAAAAA  
 95751 AAAAGGAAGA AAATCTTATC CAGTCTCTGG GCATCACCTT TCCACCCAGT  
 95801 CCTACCTCCC TGTGGCAAC TAAGGCTACT GCAGCATCAT ATGCATAAGC  
 95851 CATTGCTCTT CCTTCTGAGT GTACAGGTAT CTGGGTATAT ACATATGTGT  
 95901 GAAGTACAC ATTTATCTTA TTACAGAATA TACTACATAA TTTATGATGC  
 95951 AGAGTGAAAA GATTATGAAA AACACATTCA AGTGCCTAAA ATACTGCTTG  
 96001 GGATATGTAG CAGTATAATT GAAGGACATG TACTATAAAA GTCTAATGTG  
 96051 TAAAATTCTT TAAAGAATTA CCCACATTAT TCTATGTCAA ATCTCTTGTT  
 96101 AAAAAACAAA CTGGAATAAT TCACTGGACA GTAGCTGATT TTCAACTCCA  
 96151 AATCTCCAAT CTATTTGAGA TCCAAGCCCT CTAAGTAAGA TCACAGATCA  
 96201 TAGTTGTTTG CTCACGTGTG CATTTGGGAA TCTGCAGCAC CTATTGAGGG  
 96251 TCTTGAAGAG AATCCAGTGA GCTGTGGGGA GATTTGTATG ATCAGTATCG  
 96301 AGTCTGAAC GTGTGTTGGA CTACATGTGG CAGAGAGAGA GGTGGGTAGG  
 96351 ACACAGGTGA GAAGCACGGT CTGCCGCTA CAGCCCCAGG GAAAGAGTGA  
 96401 CGCTGTGGCG AGGCAGGGTG ATGCGTGGGC TTTGGGCTTT GGAGGAGGGA  
 96451 GGAATGGCCT TGCCAGTGT GGGCCTGCAT GCATGTCTTG TAGAATCTTC  
 96501 CTCAGTGAAG GATGTAGAAG GAGGGTACTG TGGGTTACAT GAGGGGCAAT  
 96551 AAGGGAGCAA GGACCTTGCA GAATGCTGAA CACTACAAAC ATGGTGGAGC  
 96601 CATGAACTG GAATCTGTCC AAAGCATTG GCTCCACCA TGCAGCTGTG  
 96651 GTTGCTCACC CGCCACTCCA TCACTCCACC TTGAATGACG CTCAGCTCTG  
 96701 TCTTCACTTC TGGCCCCCTT CTGCCTGCTC CACCCACCAT GGCCATGTCA  
 96751 GCTGGCTGCA TCCCTGCTGC CCTGTCTCTT TCCTCTGCCT CTCAGCCTCT  
 96801 GAATACTCCT GGCTTCTGCC TCCTCCTAAC TCAGCTTGGC TTGGATCCCT  
 96851 CTGGTTCCCTG GCATACCTCA TTTTGAAGCT TCCTCCAAGT CTCACTTTTA  
 96901 TTGGGGCAAA CTGATTAATC ACTTGAAAAA TTAATCATTT TTTAGTGTA  
 96951 AATTTTCAAA AAGTTCTGTC CAGCTGGCTC TGCTCACCTC TTAGGATGTG  
 97001 TCACGGGAGA GTCTTTGGAG TTGCAGCCTT TGGGTCACGT GTGCCCTTG  
 97051 CTCCAGTTAG ACGTGGTCAC AGCAAGTTGT GGGGTACAAA ATATGGCTGC  
 97101 CTGGAGCTAC TTATTCAGTT GGGTCTGCGG TCAAGACAGT TTTCTTAGA  
 97151 AGAGGCTGTG GGTATGGTAA GGATCGTGGT TGACAGGATT GGTATGATGT  
 97201 TGCTGGCTAC TGGGGAGGAG AAGAGGGAAC AGCGCAAATC CAGAAGCCTG  
 97251 GTTCTTTGTC CTTAAGGTCT GGCTGGAAAG AAGAAGAGCA CATGCAACTC  
 97301 CATCGCTGAA TGATCCTGAG TATCTCAGGG TGCTGATCAT GTCCTAACCA  
 97351 GGGACCCAGG CCCATGGCAG ACCACTTGTG CCACAGAGAG ATGCCAGCTT  
 97401 AGGTTGAGGG ACCCAGAGGA GCCTGGCCCA CAGCTGGTCT GGCTGTGCTT  
 97451 GGGGTGCCCT TGAAGGCATG GCCTGTGGCC TTGATGGAAC TCAGAGGGGA  
 97501 TACATCTCAT CTCAGGCCCA GAAACTGAGC TCGCAAAAAC TCCTTGAGCT  
 97551 GGAGGTGAGA GATGACCAAG CAAGAGAAAC ATCAGTTGCT ACAAATCAC  
 97601 TGTAAGAATG GCTTCTGAAA CAGGGGCCAG CCCGAGAGCT ATACAGAAAC

FIGURE 3, page 31 of 188

97651 CCTTTTTGAG CGAGAGCTGG CTTTCATGTC CCCATCTCAC AGATGGGTTT  
 97701 TGACGTCAGA GGAGAGAACC AGCGGAAACC TTATCGAGTG GGACACGGCT  
 97751 GTGGCTCTAG CCTTGCCTC AGATCCATT TGCTGACTCA CCGGTAGAGG  
 97801 CAGAGGACAG GATCGCAAAG CTCCTGTCTT CCAGAAAGGA CTCCCTGGGG  
 97851 CTCCATGAAG AGAGCGCTCT CAGTAACATT TACACTACAT TTTGTTCCCTG  
 97901 TTTGCCTTTA AAATGTTTTG TTTTCCCCCA GTTCTCTTGG AGTGGGAGAT  
 97951 AAAATCTGGG TAGGGAGCTA AGTTTGTGGT TTCTCCTTCT GCTGGAAAAA  
 98001 TTGATCTTCC TGAAAGCTTG CATGGTCTGT TCTCAGGGAA GGCTGGGAAC  
 98051 ATTGTTGGGT AGGTCCAGTA GCAAACCTCA GACTCATAAA TGAATCGTGG  
 98101 AGAGCTGACA GGAAGGTACC ACCTGGACAA CATGAGCTTT AGCCCAACCT  
 98151 GGGAATATCC ATGCACAGTC CTTGGGGTTT GAAAGGTAAT TTTTATATA  
 98201 GAAATAAGCA GGAGCTCATT TAACTTACCA CATGGTCTTT TGGGGGTCAG  
 98251 TGGATTTGTT AATATATGAT GCCAACAGG TGTTTTGCCC AGAACCCTG  
 98301 TGTAGAGGGT GTTGCTGTGG GCTGTTGTCT ATTGTTTCAC AGCATTGAGG  
 98351 GTAAGGCAAC GAGGTTCCAT TGTCTGGCCA TGCCACTTAA CTCTGTGACC  
 98401 TTAGACAAAT AGTTAATCA CACTATGCCT CAGTTCTTTC AACTGTAAAA  
 98451 TGGGGATAAT GCTGGTGCCT TCCTCATAGG GTTATTCTGA GGATTAAAGG  
 98501 ATATAACGTA CTAAATACCT TGGCACAGGG CCTAGCATACT AGTGGGCACT  
 98551 AAATCATTGG TTATGATTAT GAAGTATGAG TGAGTGGACC AGATCTTTTG  
 98601 CCTACACTCC ATATCGGAAA CCAGATGTTT GTCCCTAGAG CTCTGTGGTC  
 98651 AGTGAACACG TGCATGACTT CTGAGGTTCC TGCCAAGGTT CAGAGCAAGC  
 98701 ATTTACGGGT CAAGGCTCTG GGTCACTGGG CACTGCCCAG GGCAGCAGGA  
 98751 GAGACAGAGC TGTACACTG CCTGCCCAGC TTCATGGCTG TCTTTGTATC  
 98801 TGTTCTCCTT TCCTGGTTGC TTACATATGT TATCGTGTTA GGCCCATAT  
 98851 CCATAATGAA ACATTCAGAG TGTTTAGCAA CCCAGAAGCT ATTGCAGTCC  
 98901 TTCGCTGAAG GACTCTGTTG TTATGAAATG AATCATTTCC AGGAGAAAAC  
 98951 AAGTGAAAGC TCCAACAGCC ATACTCCTGG GCTGAGAGCA ATAACCATTT  
 99001 AAATAGCGAG AGTGAACACT CATTGGTCTC AACCCTTAA AAGGTTTTCT  
 99051 TGGGATAAAT TGGTGCTTGC TGAGTGATT GCTTCTCTGT GAGGGTATTC  
 99101 TGGGTGCTGG CTGAAATGAG CAAGGAGGAG GCAGGCCCTG GACCACAAAG  
 99151 GCTCCTCTCT GATAAAGAAT CAGAAGAGGA AATTAGAAAA GCAAAAATCT  
 99201 GGACAGGCCA TGA AAAAGAG GAGACGGAGA AGGTTGGCCA GGTCTTTGCT  
 99251 GTGTTGTAAG AAAGAGGAGG TTTCTGTCTC TTGAGAATCC AGAGCCCAGA  
 99301 GGAGATGAGG TGTGGGGGTT GCAGCTCTGT AGCCAGGGCA AAAGTGCAGG  
 99351 AGAAGGGCTC ACCCAGTGTA GCAGGGCAGC TCTGCTGTGG TCTGAAGGAG  
 99401 GCTTAAACAC AGGGATGGGA AAGTGATGGG GTGGCTGGAA TAGGCCTGCA  
 99451 TTTTGAAAAT CAAAACCTAGA TTTATTTTCT TTCATTTGTT GTACTGCTGT  
 99501 GGTTACTCAG AAACCAGCAA CTATGTCAGG TTCCTGGTTT ACAGAGTAAA  
 99551 CCAATAGCAA GTCCTTTAAT GTGCTTCTAG AGGTATGCTT TCCTTCCTTG  
 99601 AGAAACAAGG AAGGATTACA AGATTAACAC TTACCTTATA TATGAGTAAG  
 99651 ATGATTAACA AGATCAGCAC TTACCTTATA TAAGAGTAAG ATGAAAGGCC  
 99701 CAACAAGACA GACTCTAAGG AGCATGTAAA ATATCAAGCC TTGCTTAAAC  
 99751 AGGATCTGGG CAAATACAT CCTAGCAGTT TGCATTAAAC AGATTATACT  
 99801 GTTAATGCTA TTTTAAAGCT ATTTGCTTCT CACTCATGTG GTTTCAGGAC  
 99851 TTCCACAGAT ACTAAAATCC TCAGATGCTC AAGTCCCTTC TACAAAGTGG  
 99901 TGTCGTTTTT GCATATAACC TACACACGTT CTTCCATACA CTTTAAATGA  
 99951 TCTCTGGATT ACTTAGTCAT GTGCTGCATA ATGATGTTTC AGTTGACAAC  
 100001 AGACCGCATG TACAGTGGAA GTCCTGTACG ATTACACTGA ACCTGAAAAA  
 100051 TTCCTGTAC ATAGTGATGT CATAGCTGTC ATCACATCAC AGCATAATCC  
 100101 TTATTCACGT GTTTGTGGCA ATGCTGGTGT AAACAAACCT ACTGCAAAAT  
 100151 ATGCTGGGGA GTACTTAGCT TATCCATAGT TGACCCTCCC AAAGGTAGCT  
 100201 CAGACCTTCA AGATAGAAAG CCAAGCATTT GACACATGAG ACCTGACCTC  
 100251 AAAGGAAAGG GCTATTTTAG AATCCTTGCA ATTTAAGATG ATTCCCACCC  
 100301 ATCCCCATGG CAGAATAATA GTTAATAACA GTTAGCTAAC ATTCACTGCA  
 100351 TGCTTGCTGA GTGCCAGGCA CCAATCCTAC CTGCAATTTA ATTTTCATCA  
 100401 CTTTGAGGGG GTGGTGCTAT TCTAATCCCC ATTTAACAGA TGAGGAAAGT  
 100451 GAGGTGCAAA GAGACTTAGT AACATAATTA GAGGGCCAC ACTCATGCAA  
 100501 CCAGGGACCA GTGTAGCTAA AAGAAAAATT CATTGCTGTT CCCTTTCATA  
 100551 ATACAATTTT GCACAATGAT GACATCCGGC AAAATACCCA ATGATGCATT  
 100601 TCTCAGAACA GATCCCATCA TTAAGCAATC TGTGACTGTA ATACCTCACA  
 100651 CAGTGTGCTG TATAAATAGT TGTATACTG TATTTTTAAA AAATTCTACT  
 100701 TTTTATGGTT ATGTTATTTT TTATTTTATT TTATTATTAT TATTTTTTTA  
 100751 ATGCTTTCAG CCAGGCGCAG TGGCTCATGC CTGTAACCCC AGCACTTTAG

FIGURE 3, page 32 of 188



100801 GAGGCCGAGG AGGGCCGATC ATGAGGTCAG GATATTGAGA CCATCCTGGC  
100851 CAACATAGCG AAACCCCATC TCTACTAAAA ATACAAAAAT TAGCCGGGCA  
100901 TGGTGTCTGGG CGCCTGTAAT CCCAGCTACT TGGGAGGCTG AGGCAGGAGA  
100951 GTCTCTTGAA CCCAGGAGGT GGAGGTTGCA GTGAGCTGAG ATCATGCCAC  
101001 TGCACTCCAG CCTGGCGACA GAGCGAGACT CAGTATCAAA AAAAAAAAAA  
101051 AAAAATGCTT TCAAGTCTCC GTTGTGTTGAA TCTGTAGATG TGGAACCCGC  
101101 AGATCCAGAG GGCCGACTGT ACGTAGTTAC TTTCAAAAAA GAGCAGTAGA  
101151 CTCTGGAAT GGCGAAGGTA GTTCTGAGC TAGTTCCAAA GCATCTTTCT  
101201 GATCCGCTG CAGAAAGGAC CCAAGGGGCT CAAACACTTT CAGCCTGCTT  
101251 GGGGAGATTA TCAAGAGCTG GTACAGCATG CTGCATTGTT CTGTTTCAATT  
101301 TTATTTAAAA AATTAATACT AACTAATATT TATATTGCCT GCTTTTTATT  
101351 TTATTTTATT TATTTTATTT TTTGAGACAG AGTCTCACTG TCACCCAGGC  
101401 TGAAGGGCAG TGGCGTGATC TCGGCTCACT GCAATCTCTG CCTCCTGGGT  
101451 TCAAGCGATT CTCTGCCTT AGCCTCCCAA GCAGCTGGGA TTACAGGCAT  
101501 GTGCCACCAT GCCCAGCGAA TTTTGTAGT TTTAGTAGAG ATGGGGTTTT  
101551 GCCATTTGG CCAGGCTGGT CTGGAACCTC TGACCTCAGG TAATCCACCT  
101601 TGGCCTCCCA AAGTGGTAGG ATTACAGGCC TGAGCCACCG CGCCTGGCCT  
101651 ATTGCCTGCT TTTTAAAGGC CCAGTCTAAT TTATTTTCAGG TGAATTCTTT  
101701 CAGAAATACG TGCTGTTTGT TAATTCATTC AGCCAGCCAG TCATTCTCTC  
101751 AACAAATATT TATCCAACAA ATATTTATTG AATGACCTCA CTTTGTCCAG  
101801 GCACTGATCT GAGCACTGAG AGCCAAGATG GATGCTTAGA CAACTTTGTT  
101851 TTCAACCTAA TTCTCACTTT TGTTTGTGCC CTGCCTTAAC CCTCAAATTC  
101901 ATGAATACT TTGTGTACA TCTGCTCTCA TAACAATGCT GGGCAAATTA  
101951 TTCCCCCGTT ACAGAGGTGA GCAAATGGAG CTTAAGACTG TGTAGCGGTT  
102001 ATATGAACCA TATGAATAAG TGGAAAAACC CAGAATTTTT ATTCTGCTCTG  
102051 CTGTCTTGT CTACCCACTT GAGCTTCCAA TCTTCTTCT GTTTCCTCCC  
102101 TGCTCATCAG ACCAAATCTG TCCCCTTTCT CATTCTCTC GAGTGGAGCT  
102151 GTTGACTTTT CAGAGTGACA AGTTGATAGA ATCAACTCAT CTGTGTGAAT  
102201 GGTTGGGAAG CTAATAATGG CTTAATATTA TCCTGCTGTG CATTCTGCTG  
102251 TATCCTGGCA CAAGTCTCTC AGCTTGTC ACAAATCCCC TGCCTTTGGC  
102301 TCCAACGGAT CCTGTGTTAG CTAGAGTTAG GGAAACACAT GGACTAAAAC  
102351 TTCCTAACGA GGTAAGAGCA TATTTCTGCC ATGTCACAAA TCCCTGGACA  
102401 ATCAAATGAA TTGACAGTCG TTATTTTTTT ACAAACAAT TACCAGCATT  
102451 TTCTGTAAGA GGTGGGTTTG GGTGACAGCT CTGATGATTT TCCATTCAAT  
102501 GAAGACTTCC TGAAGGTGAA GGTCTTCCC CAGCTCCAAA AGAGACTCCC  
102551 ACCTTGCCAG CATTTGCAGG CAGCCTACTT GCCACTGTC TGGGATTCTA  
102601 TAGTTGTCTT TCCTTAAATA AACCTACTTG AAGAATATAT TCAGAAGCAA  
102651 GTAGGATGGG TATTTTGTAT GGGGATTGAG AAGAAGTGTA GTTGATTGGA  
102701 TTTTATCTTG CAACTGATTT GTTCTGCCA GATGTTGATA TGTAACCCCTG  
102751 ATGCTGTGAT TCCAGGCCTC AGGAGCAGTA ACGTTATAAA CAACCTCCG  
102801 TTGCTTCATC TGCTAGTAGG AACCTTAATT TATCACGTAG GTGATAGAGT  
102851 TGCAGTTTCT CATCCACTTG TGAAAAAATT GGGCAGCTGT AGGGAATGCA  
102901 TCCCTTCTTT TAAAGAAATC ATTCTAAGGA ATAAGACAGA GAATTTATTC  
102951 CAAAATATCT TCATCCAGT GGAAATAAAA ATCCTGTCTA ATGGCTCAGA  
103001 ATATCTCTG GGCTTTGATT AAGAAGGACT TGTAAGGATG GGCTTTTCTT  
103051 CTCTTACTGT TTGTCTCTG GGCTAATCAG ACTTTAGGAA GAGAATCTTG  
103101 TCTTCGGCAC CTACTGGGCG AGGCACCTTC TGGGACACAG ACATCTGCCT  
103151 GTGAAACCTG CTGTGCCAC AGATGTGCTT TGAGGGTGCT CATTATTCA  
103201 GTGACTTGCT GATGACTGGA GAATGGAGAA GGACAGGAAC CTCCTCTGTT  
103251 CTTTAACCTC AGACACAATG CCTGTTCTGC TATGTTTAAA AATAATACCT  
103301 TTTATAGTTT TTTTCTGGTT ATAAAAACAA AACTTGTCCT TTTTAGAAAA  
103351 AATTGAATAT ATAAATAGAG AGAGAGAGGA AGGCAAAAAT TACTTGTAAT  
103401 ACCACCACCT AGAAATAGTC TTTGTTATTA TTCTGATTTA TATCCAGCCT  
103451 ATTCTCTGTT AATGCATTTA TGTGTTTGT ACAAATTGAA ATCTTCTGT  
103501 ACAATCTATT CTATGACCTG AGGTTTTTCA CTTAGCACTA TATTTTTTCT  
103551 TTATTGTTAC TTAAAAATA TATTCTGCAT CTCTGCATAA AGACAACATC  
103601 TGAACCTGTGA AAATACAACA ATGACCACTC TCTTACAGGA GTCTGACCC  
103651 TACTCGAGTT CATATTCACA GGGGGAGAGC AGGCATTAAA CAAATAATTG  
103701 TACCAGTAAT TATTTGATTG CAATTGTGAT AAGAGCTATG AAGGAAAAGA  
103751 ACAGAGGGCT GTGGGCACCT GACTAGTCTG GGGAAATCAA GAAGGCTTCC  
103801 CTGAGGAAGT GGCATGAAGG CCAAGAGCTG GTAGCTGAGT AAAAGTTATC  
103851 TAGAAAAAGA GAGCCCAGGA TAGGAGTGGG AGGAAGACGA GAGCTCTGGG  
103901 AGCTGAGAAG AGCCAGCATG GGTAGGGAG TGAGGGGATA CATGGGACAA

FIGURE 3, page 33 of 188

103951 GGTAATGCAG TAGAGGTAGG CAGTGACTAG GTCGCTCAGA GTCCCAGTGA  
 104001 AGAATGTTGA GTTGATCCTA AAAGCAGTGG TAAGCATCAA TAGGTTGTAA  
 104051 TCAGGGTTGT GACTTGATGA GGTATATAGC TTAAAGGAT TATTCTGTTG  
 104101 TAAAAAATGG GGATTATGGA GGCTGAGTTA GGAACTACT ATAATAACCT  
 104151 AGAAGAGCAA CACTTGTGGT TTGGAATAGT ACAATGGTAG GCATAGGAGA  
 104201 AATAGATGGA TTCTACCTAT TTTCCCTAT GTTTGAGGAG CGTTTTGATC  
 104251 AGATATGGTG ACTTACTGGA TATGGAAAGT GAAAAAGGAG CTTAGGGAT  
 104301 ACTTCCTAGA TTCCTGCCTT TTTACCTGG ACAGAGGCAC TAAACACTAA  
 104351 TACAGGGAGT TTCGGGGGGA GGACCAGGTC TTTTGGGGGT AAATGATTGA  
 104401 TACGTTTGG CTGTGTTCCC ACCCAAATCT CATCTTGAAT TGTAGTTCCC  
 104451 ATAATCCCCA CGTGTGGTAG GAGGGACCCG ATGGGAAGTA ATTGAATCAT  
 104501 GGGGGCAGTT TCCCCCATGA TATTCTTGTG ATAGTAAGTT CTCACGAGAT  
 104551 CCGATGGTTT TATAAGGGGT TTCCCCCTTT GCTCGGCTCT CATTCTTCTC  
 104601 ATTCTCCCA CATTGTGAA GAAGGACATG TTTTCTTCCC CTTCTGCCAT  
 104651 GATCGTAAGT TACCTGAGGC CTCCCCAGCC CTGGGAAACT ATGAGTCAAT  
 104701 TAAACCTCTT TCCTTTATAA TTTATCCAGT CTCTGGCAGT TCTTCATAGC  
 104751 AGTGTGAGAA TGACTAATA CAATGATGGA CTCTGGTTTA GACGTGTTAA  
 104801 GTTAGATGTG CCAATGGGAG AGGAGAGAGC ACATAGGCTG TTGGCTATGT  
 104851 TGGGCTGGAA TGCATCACAG GGAAGTGGGC TGAATATGGA GATTTGGGAG  
 104901 TCATCAGCAT GTGGATGGCA AAAGAAGCCA TAAGTGGCTA AAATTGTCTG  
 104951 GGGCAAGAAG GTAGAATCTG AAGAGAAGAA GGTCTACCAC AGGGCCTGGA  
 105001 GAGCCAGAGC CACTGACCTC TTTTATGGGA AGGTGGATGC ATTTGAGGCT  
 105051 GAGTCTCCTT GTCTCTTTTA CACCAAGCCT GTCTGAATTC CCTCAAGACA  
 105101 ACTTCTCCCA TTTGCTTTAT GATCCCGGTG GTGTGCCGGA GCCAGTGCAC  
 105151 ACTGGCTTAT GCGAGCTTAT TGTTAAATTT GCAGGAATTT TGTGAGCCGC  
 105201 TTGTTTGATA CTGGCCATGT TAGGAGCAAT CACACATGGA AATTGTCAAA  
 105251 TTCTACTAAT CAAGGTTTTA AATTTATTTT TCCCTCTTCC TGGAGTGCTG  
 105301 GTTGTTTAAC ATTTACCAGC ATATCTCCGT TTCTAACCAA CTCATCTTTG  
 105351 CTTCTAGTGC AACTTTGTGG GTTCTTTCCC TTGGAATCTG GGAGTAAGCA  
 105401 TGATCTGTGA TCATTTCTAT ATCTCTCTGG AAAGTCTCTA ATTTTGTCTG  
 105451 AAATTACCAG CCCTTTCTGC TAATGAGCGA GTAAGCAAAT GACTTTACAT  
 105501 TGATACAGTG AACCTCCTCA GTCTCTGTAT AAGTTTTCTA TTGCTGCTGT  
 105551 AACACATTAC CACAAACATA GCAACTTAAC ACAAATTTAT TGTCTTAAAG  
 105601 TTTCTGTAGA TTAGGAGTCC TCATGAGGGC TTAATGAGGT TCTCTGCTTA  
 105651 GGGACTTACA AAGTTAAAT CAATCGAAAG AATTCAGTGC TGTGTGAGAG  
 105701 TAGAAGCTGAG ATCCTTGCTG TATTAGGCTA CTCTCACAGT GCTATAAAGA  
 105751 AATACTGAG ACTGAGTAAT TTATAAAGAA AAGAGGTTTA ATTGGCTCAT  
 105801 GGTTCTGCAG GCTCTACAGG AAGCATAGTG GCTTCTGCTT CTGAGGAGAA  
 105851 GGAACTTGC AGTCATGGCA GAAGGCATAG GAAAAGCAGG CACGTCTCAC  
 105901 ATGGCCAGAG TGGGAGGAAG AGAGGGAGGG AGAAGGTGCT ACACGCTTTT  
 105951 AAAACAACCTG GACCTCATGA TAACCTCACTC ATTTACATG AACAGCACTG  
 106001 GGGAGTTGGT GCTAACCCAT TCATGAGAAC TCTGCCCCCA TGATCCAATT  
 106051 GCCTCCCAAC AGGCCCAACC TCCAACACTG GGGATTGCAA TTCCACAGGA  
 106101 GATTTCTGGG GGACGCAGAT CCAAACCATA TCACCTGCTT TCTTTGCCGA  
 106151 CTATTAGCTA GGGGATGCTC TCTGCTCCTA AAAGTCACCT GCATTCTTCC  
 106201 CTTCCCGTGT GGCTCTCCAT CTTCAAATTG GCAGTGGCAT GTTAGATCCT  
 106251 TGTCAGGATT TGATTCCCTT TGACTTCTCC TCTGCCACCA GCCAGACAAA  
 106301 GCTCTCTGCT TGAAGGGCTT GTGTCAATTCT ATCAGTCTTA CCTGGATAAC  
 106351 CTTTCTGTCT TTGCATCACC CGTGCTGTG TTAGTCTCCT AGGGCTGTCTG  
 106401 TAACAAAGTA CCACAAAATG GGTGGCTTAA AGCATGGGA ATGACTTATT  
 106451 CTCTCACAGT TCTGAGGCT AGTGGTCTAA AATCAAAGTG TCCTCAGGGC  
 106501 TGTGCTCCCT CCAAAGCCCT TCTTAAAGGA AAGGAGGCCT TCCTGCCCCCT  
 106551 TCCAGTTCTT GGAAGCCCCA GGTGTCCCTT GCCTTATGGC AGCATCATTC  
 106601 CCATCTCTGC CTCTGTCTTC ACATGGTCTC TTCCCTGTGT GTCTGCGTTC  
 106651 TCCTCTCTGT GGTGTCTGTG TCCAAACTTA TCACTTCTTA TAAGGACAGT  
 106701 AATCATGTTG GATTAGGGCC CACACCAATG GCCTCATCTT TACTTGATTA  
 106751 TATCTGCAAA GACCTTATTT CCAAATAAAG TCCTATTAC AGGCACTGGA  
 106801 AGTTAGGACT TCAACATACC TTTTGAAGG ACCCAATTCA ACCCATAACA  
 106851 GTGCCATGTA ACAAATAGA ACATAATCAC ATGAATGGTA CTTATCATTA  
 106901 TTCATTGGTC CCAGGGGTTA CGGCATGGAA TATTGGGTGG TGAGGAGGCA  
 106951 TTTTGAAGT TCTGCCTACC ATAGTCTTCA AAGGTGCCCT TTAATAATT  
 107001 GTCTCATCTG CTGACTTACC TAAAAATAGA TCCCATGTCA TCCATGGTGC  
 107051 CTCCTTGAAT GACCTCAGTT TATACCTGTT CCTCCTTCTT CCAGTTTGA

107101 GTATTGTCTG CCTAACAAAC AGGACTTTCT CATGGACTGC ACTGTTCTCC  
107151 TTCCAGAGGG ACAGACTCCT AGAAACTCAG TGCCTGAGCT GATTACGATA  
107201 TTTGGTACAA GACACAGTGA AAATGAAGAA CTCTTCCATC CTTCAAACAT  
107251 GACCAATTTT GTGCTCCAAT CCCAGCAAA GGAAAGTTTG CTTTGTCTTT  
107301 TTATTTTTTT TTTTCTTAAA ATTGTAAGGC ATATAACAAA TTGCTCTGCA  
107351 TTTTCTCTCA CATGGTTTTG GTTGAAGAT GTCTTCTTTT CCCAGCCGT  
107401 CTGCTGTACC TCACTCTTTA GCACACTCAG GCTCAGGCTG GAGTCATCTC  
107451 TATGGCCACC TTGTGATCTG CCCTCTCTTT TCATCTTCCC CAGAAGCACA  
107501 TTTCCACCCA TGAGTGATAG CCAATGTTCCA TCTGCAACTG GCTAAAATTG  
107551 CACGGCACTT AGACTCTCCC TTTTATCTCC CCTTCCTCCA GATGTCAAGC  
107601 AAATTCAAAA GTTAAAGCAG ATGACTTTTT TTTTTTTCAT GAAGCAAACA  
107651 GGAGTCTTGT CAGTTTCTGT GCTTTACAAG AGTGTGAAA ACTGAATGGC  
107701 TTCCCACTGT GTGTCCAGTT TGTCTCTTC TGGGCAATTT CCTTTGGAGA  
107751 ATTTAATTGT GCTAAATTAT TATATGATCA TCTACTCTAT CCAGAAAGGT  
107801 TAGAGGTAGA ATTAGTCATA GGAAATCTTT TTTGAAATA GGTTTGGCTA  
107851 TTTTATCAGC TTTTACATT CAAAGGTTA ATATGTTAAT CAGTTTAATT  
107901 TTTTTTGACA TGACTATTTT GTAAAATAGC CTGAGAGTGC AAGCTTGGAA  
107951 AATTAACACC TTCATTATTT TGTGGGTATG TGTGTTGATT TTTGTACCCC  
108001 CAAGATGACA TGACACCCCT AGAGTCAGGA GGCTGGGTCT TATTGTTGCC  
108051 GAGGTAAAGT TCCAGGCATA TCTGGTCTAA CAGGACCCAT GGAAACCAAA  
108101 GCTTTGTGTT GTGGGGCATT CTGTGAAGAA AGGATGATGA GGCCTTCCTT  
108151 CTGAGGAAGG AATTGAACCG ATACCTTAGA TCTCATTACC TTTTGTTCAA  
108201 AGGCAGGGTC AGGCAGGGTG ACAGGCCCAA GTTCAGAGTT CAGTAAGCAT  
108251 GAGCTCCAGT CTCGAATGCTA AGGGTCGTTG GCATACAAAA CCAGGGACAA  
108301 ATCAGCTAAC TACTTTCTTT GTCTGCAAAA TGAAAGCTCA GTTTCTCTTC  
108351 CAGGGACACT CAAGGATCAG ATGAGTTCAC AGAAATGAAA GTGTAAAGAC  
108401 TTCAGGGAAG AGGAGGATGG TGAGCCAGGC CCAGGCAATA AAAAGACTCA  
108451 ACGTAAGCCT TCAACTTGAA ATGGGGCCCA GGACATGCTC TTAGAACTCC  
108501 TGCTCTACTC CTGTAGCAGA GCAAATATTG ATTCAATGCT CTAAGTGTTT  
108551 ATGAAGCGCC CTATACATCC CCAGCCTTTT CCTGGCCCAT GAGAGGTGAT  
108601 AAAAAGGAAA TATGCGGCAT GGTTCGACG CCGTCTGCTC TAGTGGTAAA  
108651 GATGAGAGTG CTCAGAGCGG GCCATTAAAT ACATATTGGT TGATCGAATA  
108701 AATGAATGTC AAGCAAAATA TGACATGGCA GGATTTAGGC TCTACCTTC  
108751 CAGGATCTCA TAATAAAGCT AAAATGTGTA CTGTGCGAGG TAGAGATGGG  
108801 TAGAGATCAT TGCTGCCTCA AGGACTTCAA AGGGATGAGA GAGAGGCTTG  
108851 GGTGGCATGG CCTTGGCAGC ATGTCAGAGG CCCCAAATCC CCAGCACAGG  
108901 ATTAATCAGT TGAGCCTGTG CTCAGTCACA GAAGGAATTG AAAATCATGT  
108951 AAGAGTGTGC TTCACTGAAG CAAATATGAG TTGTCACTGT TATGAACAGC  
109001 ACATTTTCAGC TGAAGTCAA CCTAGGAGGT TGATTCTTGG GTTTGGATTT  
109051 GGGGAAGCAG TTGGTAATTC CAATTTGTGC AAGCTGATAC TAGACGCGCC  
109101 ACCCTCAGAG CCCGGATCAC AGATTCATAG ATGCTGACT TTTGCTTAGA  
109151 TCCACACTCA CACACTCTGT GTGTGTGTGT GTGTGTGTGT GTGTGTGTGT  
109201 GTGTGTGTGT GTGTGTATTC CCCTTGTGTT ACTTACTAGG GGAATCCTAC  
109251 CACATCTCCC AGGCACTTCC AGGACCCAGT GATGTGTGTA GCCATGAGAG  
109301 GGCTCTGTTC AAATGGTCAG ATCCCTCCAG AGATTTGAGC TAAACCAGCC  
109351 ATCCCAGGAC ATTAGACAGG GATGGCGTGA AAGCTGCTTT GCAGATCTCC  
109401 TGTGTGTAGT TTTTGAACA TGGTCATGAG AAGAATTGTT ATTCACTCAG  
109451 TCTGCAACTG TGTGGTCGAA CTGGGCATAT ATGACTTGGA TTCATTCTGA  
109501 TTGGTCACTG CTCATGCTAT ATCCGTGTT ACATATTTAG AAAATTACCT  
109551 GCGAGTGCAA TGTGTGTGTG TGTGTGTGTG TGTGTGTAAT TTGTGTCTGA  
109601 TGAAACATG GTGGCCTTTG GGATTCCAGG CATTGATTCC CAAGAGCCTC  
109651 CCTGAGGACA AGGGTCTGTG TCTGTTCTTA CTCCCATCTC TAGTTCTGCT  
109701 AAAACAGACC TCACAGAAGA CAGGCCCCAG CAGGTGCTCA ATAAAAAGTG  
109751 AGTGAGTTGG TGTGATTGA ATATGTAGGG AGGGGAGAAT ATGGTCACTT  
109801 ATGAGAAGTG AAAAGTACTC TGAAAGTTG GAAAGGGCTT AAAAGGCATG  
109851 ATCTTTTTT TTTTTTGA GACTGAGTCT CACTCTGTCA CCTAGGCTGG  
109901 AGTGTGGTGG TGCATCTCG GCTCACTGCA ACCTCCACCT CCCAGGTTCA  
109951 GGTGATTCTC CCGCCTCAGC CTCCCGAATA GCTGAGATTG CAGGTGTGTG  
110001 CCACCATGCC CAGTTAATTT TGTATATTTA GTAGAGACTG GGTTCACCA  
110051 TGTTAGCCAG GCTGATCTCG AACTCCAGC CTCTCGTGAT CTGCCTGCCT  
110101 CAGCCTCCCA AAGTGCTGGG ATTACAGGTG TGAGACATCA TGCCTGGCTG  
110151 ATCTATTATT TTTTAAAGGA TAACTTTAAA TGTATAGACG TATCAATAAT  
110201 GTATAGATGT ATAGAGTCTG TAATAATAAT CCTGGCTTCT ATCCACCTCT

110251 GTGTTGCAAT TCTTAGTAAG CAAGACCATG AATAATGAGT CTTGGGGAGA  
110301 GGAAACTTTC TCAAACATTA TTTCAGTAA GACAGAGATG AGAGAATGTG  
110351 GGATTAGCCC CAACAGCAGC TCTGGAAGCT CTAAGGAGAA GAGCTTGGAG  
110401 AGGCAGTCAC CGTGCGGTGA GGCACCTGAG GATTATCTG GAAGTCTCAT  
110451 TTGCACAGTA CACCCACTGC TCCAACCTCCC AGTATGTATT TATTGGGGGG  
110501 GTGCTAAAGA ATATTATGGG ATAGCAGAGG CTTCCCTCTC TCCAGCTGCC  
110551 CCTCAGTGCC ACCAGTGTGT AGGCTGGGTG CCATGCATGG AGACAGACCC  
110601 CGCAAGTCAC AGACAAGCCC AGTGCACAGA GCTGGGCCTT CAGAAACCTT  
110651 TCTGACCACT TAGTATGCGT TCAGCAGAAG CACCTTCTAG ATAAAATCTT  
110701 TCATGCGAAT TTCCCTTCTG TAAACCTTCA CCTAAATCTG GTCTTTCTTG  
110751 AGAGCATCTC CTACTTAGAA AACATTTTTT TTTTAGTTG TATAACCGTG  
110801 TTCTATTATG CTTGCCATTT AAAGAGCAAG GGGGAAAATG TAGGCAGGGC  
110851 TTCTCTGGAA GCAGCAAGTT CATGCATCTG GGTCTGAATC ATATTCTAAG  
110901 TTTATCAGAG ATGGATGTCT ATGCATCATA GACTCCAATC CCCCAGTGCC  
110951 AGGTCAGAGG GTTTCAGCCC CAGTACCCCT GTCTGCCTGC GTGACCCCCA  
111001 CAGATTACAG ATCTGATGTC CCAGAAAGAG GCCTGATGAG TGAGGATAAG  
111051 GAACAAGCCT CAGGAGCTGC CTGAGCTTGG GCTGAAGGGG ATGCAGAGGC  
111101 TTCTCCTGCC CCTCAGGCAA ACAACAGCAA AAATACTCTC AGCAGCTATG  
111151 GCTACCACTT ACTGAGCATG CACTATGTGT TCAGCAGTGC TCTATGTATA  
111201 TTATTCTGAT TCCCCAACC CCTCTATGAG ATAGGCTTTA TTATCCATCT  
111251 TCTTCCATCG GGAGAGGAAA CTCAAGGAAG GTGACCATCT CAAGGTCACA  
111301 CAGCCACCTG AGTGACAGAA CCAGGATTGG AACTCAGATG TGCCTGAGCC  
111351 TAGAGCTCAG TGACCTGCTC CCTCCAGGGA AGGCTCCTTC TTCATGTGGA  
111401 AGTGGGGGTC TCAGCTAATG CTGTGGTAGA CCCATTGCTT CAGAGCTGGG  
111451 CACCGTGGGC AGTGCCAGTG AGGATGGGCC CAGGGGAAGA GATTTCTGGT  
111501 TTCTTTGTCA GTATAAGTAT GTTTATAGCA CGGCACCCAT GAAGGAACAG  
111551 CAGACCCTGG GCTGAGGTGG GCAGAGGCTC TTGGGGAGCC CAGGTACCCC  
111601 TAGGGGACAA GTGAGGGAAG AGGATTGGGG TAGGGCTGGC TAAGACCAGA  
111651 AGATGGGCGG GAGGCAGTAA GGGGGAGTCA GGGCTTTGGG CAGTCCAACT  
111701 GGACGTACAG GGGGGACAAG AGCAAGACTA GCTGCTGAGT GGGAGAGGGC  
111751 GGGACAGTGG CTTACGATGG CTTGGTGGGG AAAGACTGGC AGTGCAGCCT  
111801 GGTTGCAAGT GGTTTGAGCG TCCCTTAGAA CCTCCCTCCT GGGACAGCCC  
111851 CAGTCTCAGA ATGGGGCAAA GGCAGGGGAA GAGCAGGCCA GGATCACCTC  
111901 CCTCACTGTC CTCGTGTCCG CATTTCCCTAT GGAGCCTCCC ATGACATTCA  
111951 TCATGGGGCA TCTGCGAGGG TATTGTGGCC AGAGATACCA CGTCAGGGAA  
112001 TGCAGAGGCC TCCTTCCTTG GTCTGGGTT GATTCAAAGC CTCATGCCAT  
112051 GAATGCAGAT CTTTGCCCTAC AACACAGTCC CCAGGGCTCC CTGATTCTCT  
112101 TGGTGGGAGG GCCATGTGGC CAGGTTTGTG GGAGAGGCTA AGTCAACTGT  
112151 GGTTTTTTTG TCTTAAATCT TAGATGTCTG CACACCTGCC CTCTGAAGGG  
112201 GGTTAGCATG AGAGAGAGAG AGCTGAGTGT CAGACCACGG AATTGGGCAG  
112251 TTTCTTCTCT TCCAAGTTAA CATCTTGGA AGCACCTGC ATTTTATCT  
112301 ACAAGATTGC TTTCTTTGTT TGTTTGACTG TTTCCATACC TACAGAGCAT  
112351 TTGCTACATC TCCCTGCTTT ATTTTACAGA GTTGATACA TTCTACTTAA  
112401 AGGAATTGGG TGTAGGTGGG CTTGGATGTC AGAGCACATG CTGTGGAGTG  
112451 TAGTGGCATA GTCAGAAGTG AACGATCGGA GGATGGAATC TCAGGTTATG  
112501 TGCTGCAGGT GGCATTGGTC CTTCTGCTCC CAGCGTCAGA GCTGCAGCAC  
112551 AACACATCTG CCCTCCTCTG CCTCTGAACA TCCTCAAACC CAGCAGGAGC  
112601 CCCAAAGACC CCTAAGCTAC CCATGCTGAG GCCACTGTCC CTGCGTTTAT  
112651 GCTCTTACTT ACTTCAGTGG AGGAACCCCA CTTGATGTCC TCACAGCCTA  
112701 GTGTCTCCTG CTTTAAACAT AATTCTAACC ACCTTGATCA TCTGATTTC  
112751 TGGCCTATGG ACATTTAGAT GCAGGAAAGG AGCTCTCAGA GACAGATTTT  
112801 GGTCACAGTG CAGGGGACAG GTGGCCACCC AAATGCAAAT TGCAAAAGTG  
112851 GACAGAAGGC CACTAGTTTA CACAAGGTTG CCTCAAACCT CCCTCTAATT  
112901 TCTCGTTAGG CCCCAGGAGT GTCCCCGGAG CAGAGCATGG GCTCATCATT  
112951 GCTGTTCACT GTGATGATCC TAACTTCCCC ATCAAGCTCC AGAGACTTTT  
113001 CAGTTCTCTC TTTGTAGAAG GTGTGGAAGT GTGTTATACC CCAGAGCAGG  
113051 AACTCCATCC AAAATATTTA CACTTAGAAT AAAACATATT TTGTCATGTA  
113101 AAGGCCTTAA GCTCAGTTAT TTGGATTATC GCTCATCCCC TTAGAGATGT  
113151 CCGCAAATGA ACCAATTTTA GAGAATGATT TGTGGCACTT ACTTCTTCCA  
113201 CTGTTAGAAC AGCTGCCTCC TGGGTGTGCC TGCCACATCG TGGGATCCTT  
113251 GCTCCTTTCT CCAGCAATCA CAGTGAGTGG CCTGGAGATG AGTTGCAGAG  
113301 TTTCTCTGAG CTCAGAGTTA CCCACTTATC CACCCAGCCC TTCCCCGCAG  
113351 AGGCCTGGTC GAGTTTTGGC CTTGCTCATT AATAGCACGA TTCTCCCATC

FIGURE 3, page 36 of 188

113401 TCTCATACTG GCTACAATCC CTCATTCCCA ACCGGTGTGT AAGTGGGCTA  
113451 GCATGTGTGT GGATCCTTCT CACAAATGTT TCTGGCTGTG CGTTTCCCCG  
113501 GATGGATTCC TGTCAGGATG CTATGGGACA AGACATGAGA CATCCCATCC  
113551 GCTTTGTTGA TTCAACATGG ATATGTTTGC TTTTCTGCCT CAGAATGGAG  
113601 ACAGTTGTTT ACAGCCTCAC CAGTCAAAAT ATTTACTAAA CGTAACCTAC  
113651 AGTTCCAGGA TTGAGAGGAA GGAAAACACA CAGTTCACTT TCCATGTTGA  
113701 TAAAAACATT TGCATAAGAT GCCTTAAAAAT GCAAGCCGGT GCCCCCTCTGT  
113751 GTGCCAGAGG GATGTGCTCA AGGTGAGAGT CTCAGGAGCG GGGTTTCCTC  
113801 AGCACACCCG GGCCACAGGC CCTCTTCTGT TAAATGTCAT ATTGAAATAA  
113851 ATGTGCACAT AAACCAGGTC ATACTCTTCA AAGGGATATC AGGATTTCAC  
113901 ATTTTCTCAC ATACAGTTTA GCCCCATGGA ATTCAGACTA AGTTGATCAA  
113951 AACCTATGAT AGGAATCCCA GAAGGTCAAA AGATGCAGTT GTTGAACATT  
114001 TTATCTTCAA AAATTACTGC CTCTCAGTGT ATTCTGTGGT GGCAGGATAT  
114051 CCAAAAATGC CTGAAAATGT GCTTTCAGCG CAGGACTCCG TTTGTGTTAA  
114101 TGTCTGCTGG GGACATTAGT AACAAACCCA GTGATTCACT GAGCTCACTC  
114151 CTGTGTGATG CTAGACTTGG AAAGCTTTTA AGGAAATTAA ATTACACATT  
114201 CATACAACAC AGTGTGTAA AAAAAAATAA AAAAGATATC ACAAGTATCA  
114251 TCTTAGGCAG GATAACATAG TGTTAAGGCC CCAGTGGCAG GTAAAAGTTG  
114301 CAAAACCATC ACACATGAAG TCCTCTATCA TCCCAGATTG CAGGGGAAGT  
114351 GGAATCTCT TCCTTTTCTT TTTTCTTCT GCTGTGGTTT ACATGTTATT  
114401 AAGCACGCAG TAGGTGTGTT TAACCTCTCT GTTCTCAGT ATCCATAACT  
114451 GTAAAATGGA TAATAATACC TACCTCACAG GGCTGTCATA GGAACCAGAT  
114501 ATCTTAGTAT GGCTAAAGTG CTTAAACAG TTTCTGGCAC ATAGTAAATA  
114551 TGCTATTGTT TTTACACATG CTGAAGCTCT GTAATTCAGT ATTGGGATTT  
114601 CTTTCTCATA ACCTTGTGTA GTCTGAAGCA GTGATTGGCT GGGGGCTGGT  
114651 TTCTGTCTCA GAAGAAAATA AATATTGAAG AAAGGGGCTA GAAGGTTCAA  
114701 TATCCGGCAG AAGGACGATC TGAGTTGACC CTGGACCCCT CCATTCTCCT  
114751 CAATCCAAAC ATATAGAAAA TAAAATATTA CTGGGGAAAA TGTTTTATTT  
114801 TCTAAATATA TGAAGTACT TGAAGGTTAG AGAAATTTCT AGGTACAAAA  
114851 ATGAACAAAC CACTCTCAA GGCAGTGACG AGTGAGCAAG CCAATGTCAT  
114901 GGCACCCTGA GGTTTGAGGG GGCAGCGTCA GACCCAGCAC GGGCCACCTC  
114951 AGGGCTAGTG GCAAAGGCTT TTATCTCCAT CCCAGGACAG CAAGTGTACT  
115001 TTGGGCCTGC ACAATACAGA AAGGATTCTA CTTAAGGCTG AGACCTGGGA  
115051 GGACTGCCCT CTCTGTGAAA ATGGGGACTA AGAAAATTTT ACCTAATGGT  
115101 CAAGGAATGT GGCAAGTAGC TTGTGGTCTG CCTAGACTTT GAACCACATT  
115151 GAATTTACAC TACTTACAG TTACAGAAAT TCTAAACCTA GAAATAAACT  
115201 TAAAGATAGG TACCATGATC GTAAAACCA TAGAGCTCCT AGAGAAATAC  
115251 ATGCAAACCC ATTATAAAGG ACAATCTCCA CACCAGAATA TACAGGATGC  
115301 CGATGGGAAA AAGAAAATCT CAACCTACAA CATAAAATTG CAGATCATAA  
115351 GGAACATAAT TGCCATCGGG AAGAGTTAAC CCCAGACTCA CACACTGGGG  
115401 TTAGCTCCTT CAGAATCTTC ACGTAATAAA ACACAAATGTA AAAGTAACCTA  
115451 TTTAAAAATC TATGTTTGAA ATTATTAGAA TAATAAAAAG AAGAGAATTA  
115501 TAAAGAAGGA ATTGTAGGGG AAAAACAAGC AAATTTGGAA AAGTAGAATT  
115551 TCTAGAAATT AACATTATTT AAATTAATAA TACAATAAAT GATTTAAAAA  
115601 CATATTAGGT ACAGCTGAAG AGAGAATTGT TGAACAGGAA GATAGCTCTG  
115651 AAATTACTCA GGAAAGAGCT CAGAGAGACA CAAAGATAGA AAATATAAAA  
115701 CAGATATTAA GAGAAAATAT TAAGATATTG AAATATTAAG AAATATTGTT  
115751 AAAAGATATT ATTAAGAGTT TTGAAGAACA AGTAGGGTAG TCTATAAGAA  
115801 AAGCGTAGAG GAAGTGAGGG AGAAGAAACA CTGGAAATGA TAATAGCTAG  
115851 ACCTTTTCCA AAATTTTTTT AAAGATATAA ATGCCTAGAT AAAAGCAGCA  
115901 CTCCAAATCA TGAACAGTAT AAATACAAAT TATGTTACAA TGATCTGCAG  
115951 AATACCAAAG ATAAAAAGTG ACCAAAGAAG AAAAAAGAT TCTCTGCAAA  
116001 GGAACAATTT CTAATTGCAA ACTTCATTAG CAACAATGGA AGCCAGAAGG  
116051 CAATTGAATA ATATCTTCTA AACAATGAGG TAAATAGTC AACTTAGAAT  
116101 TCTGTTTGA AGTGAAGGGC AAAGATACTC TCTGATAAAG ATTTAAGAGG  
116151 TTACTGAAGA GGTTCATAA ACTCTTACTG AAAGAACTAA AGGTATATAT  
116201 ACTTTAGGAG GAAGCAATT GACCCAGAA GAAAATAATG TAATACAATA  
116251 ATTGCTAGTG AGAAAGGGAA TAGGCAAAAA CATAGGCATA ATTATAAGTA  
116301 AGTGTGACT GAAGAAAAGC ATTGATAATA AAATGACTAA TTTGGGGTCA  
116351 TTTAAATAT GAAACAAGAG ATGGTGATGA TGCTCAGTAC TAAAGAATTT  
116401 TATGCTTCTT GTGTTATTTG AGAAGATACT AGGCCTTAAA AACTTTAGG  
116451 CGTTAAGTCA GAATGTATAT TGAAAATTTA AGGGTAACCT GTAAAAGAAA  
116501 AGAAATAGAA TATAACCTCT AACAGAAGAG TCTGGAAAAA AAGAGTTGGA

116551 TAAATAACAT TCAGACAGCT CAGTAGATTG CAGTTCAGTA GACAGCAGAG  
116601 AAGTAGACAA AATGAAGCAA AGTAAAGGCA TCATAAGTGG TAATAATATA  
116651 TAGCAATAAA AATAATATTA AATAAAATACT CAAATTAAAGT TGGCAAAAAC  
116701 TGAATATATC AGTAATATGT TTTAGTGGAT TGGATTTATC TGTTAGTCAA  
116751 TAGCAATTTT CAGATTGAAT TTTTAAAATA CACGGATGTG CTATTTACAA  
116801 AGATCATGTC TAAATATAAT GGCACAAAAT TTGAATGAA ATTAATTGAA  
116851 AATATATGCT AACAAATACT AAAAGAAAAA ATTAGGCCAG GCGCAGTGGC  
116901 TCATGCCTGT AATCCCAGCA CTTTGGGAGG CCGAGGTGGG TGGATCACGA  
116951 GGTACAGAGA TTGAGACCAT CCTGGTTAAC ATGGTGAAAC CCTGTCTCTA  
117001 CTAaaaaaaat Acaaaaaaat TAGCCAGGCG TGGTGGCGGG CGCCTGTAGT  
117051 CCCAGCTACT CTGGAGGCTG AAGCAGGAGA ATGGCATGAA CCTGGGAGGT  
117101 GGAGCTTGCA GTGAGCCGAG ATAGTCCAC TGCACTCCAG CCTGGGCAGC  
117151 AGAGTGAGAC TCCCTCTCAA AAAAAAAAAA AAAAGAAAAA ATTGTTTGTA  
117201 GTAACATTAA TATCAAAGTA TTGTTTAAAG CACAAAAGCA TTATTGGGTT  
117251 TACTGCACAG TGACAAAAGA ACAAATTCAC TGGGAACACA TAATAATCAT  
117301 AAACCTATAT GACTTTAACA CAGCTCCTAA ACAGACATAA TGCAAAGCCT  
117351 AGGAACCTAT ACAATAACAT CGACAAATTT ACAATCTACA ATAATGGGAT  
117401 ATTGTGACAC ATATTTTTAT AAAATGATGT CAAGCAAACA AAAATTTATT  
117451 AAAAAACAATT TTTTTTCTT TCCAATTTTT ATTTTAGGTT CAGAGGTACA  
117501 TGTGCAGGTT TGTTATGTGG GTAAACTGCA TGTTGCAGGG TTTTGGTGTA  
117551 CAGATAATTT TGTCACCCAG GTAAACAGCA TAGTAAAGAT AGTTGTTTTT  
117601 CAGTCCCTAC ACTCCTTCA TCTGAAGTCC ACCCTCAAGT AGGCTCTGGT  
117651 GTCTATTGTT CCTTTCTTTG TGTCCGTGTA TACTCAATAA AAAGTGGATA  
117701 TTTGAAAATG ATGACTAATA AGATTAATCC ATTCATTATA TGTAAGACTC  
117751 CACACCTAAT ACACATTCTT TGCATGCACA ATACAAAAAT TAGCCACATT  
117801 CTTGGCCACA AAACAAGTTT TAACAAATAC CAACTAATTG ATAGGCCATA  
117851 TTCCTTAAC AATTTGCACC AAAATCATAA ATTAATAAAA AGCCCACTAC  
117901 AAACCCATAC ACTTGGAAC TTAACAAAT ATTTTGAAAT AACTCAAGGA  
117951 TCAGAGAATA GGTCCCTAAT GAAATCGCTG AAAGTTTAGA AGCAAGCAAT  
118001 AATGAATTCA CTACATATTC AAGTATATAG GATGCTGCTA AAGCAATACT  
118051 TGGAGGAAAA GTTATAGCCT TCAGTATAAT TTTAGAAAAT TAGAGCCAGT  
118101 AGTTCATCTC AAACCTTTAA AATAATAAAG AAAAGAGCGT GCCTTAATAG  
118151 AAAATAAAGA AGCAATAGTG AGGATCAAGA AAATCAAAAT CTGGCCCCCT  
118201 GGAAAAAATA AAAAACTTT TAAATTTGTC AAAGCTGAC AAGACTGGCA  
118251 GTAACGCTT ATGTGCCAGA GACTGTCTA TGTGAATTAT GTTTTAATTC  
118301 ACTCAAAGGT CAAAATGACC TAAGAAGTAG ATCAGTTTGT TATTAATTTC  
118351 ACCACACAGC TACTAGTACT CTGTGACACC TGAACAAAAC ACTTCTATTG  
118401 TAGGACATTC CGGCATTTTT CATGGCACC TGCAGATTTA AAAAAAAAAA  
118451 AACAATGAGG CAAAGATGGG AGACTTATGA GGAAATACA TGTAAGCCAG  
118501 AGCAGGTAAT ATTAAGTTTA TAAAGGCAAG AAAGTATTT GACAAAGAGG  
118551 AGAATGTCTT GTACTGAGAA CCTGGAATGA GATGTTTCCT GGCAGTCAAG  
118601 GTTAGCATAG AAACAGGTAT TTCCTGGCAA AAGGAACGAG TTGTAGGAGA  
118651 TGATGTCACT GGTGTCAGTT GTAGGAGATG ATGTCACTGG TTTCAAGCTG  
118701 GAGGCTGGCT TTCAGGGCTA GAGGTAAGCC TTTGATCTCA CTAATGTTCA  
118751 TGGGCATCTG TTCAAATGTC AGTGATAAGT GTCTCCTTGT CTTTGTGAC  
118801 CACCTAGGGA GGGCATCAGG GCCCTACAGG TAGAGCCAAG GAGCTCTCTT  
118851 GGTCACATG GAGTGGAGAA GCTGGGGCTA TTTTGGGGT GACATACTAT  
118901 GTATCCATTG CTCAGACAGC TCAGTGTGCT GTCTATGTGC TAAAAGGGAA  
118951 CTTTCTTCCA CCAGAACTGG CATTGGTCCC TGAGCCTGGC TCTTGCATG  
119001 TCTTCTTAAG AATATTTTGA GAGTCTTAGC CCCAAGTTCT CCTGAATGTT  
119051 ACAGGCGATA TCTGCTAGCA GAACCTTCTA GATAGTACCT CAAAGGCATT  
119101 CTAGCATTTT TCACTTGAAA AATGGAAGCC CCTGGGATAG ACATGTGACA  
119151 GAAAAAAG AAAAGAGAAA TGGAGGCCCT CTGTGCTACT TTAGGTGGTG  
119201 GCAATGGAAG TCACTTGCA ATACTGCCAC ATGTGTAGGA TTATTACATT  
119251 ATTTAGCTGA CTGAGTTCTT CCTCGCTCT CATGACACTT GGCCCCATCC  
119301 CAACACTCAG TGCAATGAAC ATCTCTGAAC AGGAACCAGG TTTCTGCAGT  
119351 GGAAGTGGC AGGCAGATGC CCCACAGAAG GTTAGCCGAG AAACGGGTTC  
119401 TCCAGAGGGT CTGCCCTATC ACTTCAGAGG TCCAGAGTTT GGTATTTATC  
119451 TTAAGAATTT TGATGCTTC TGGCCTGAT TAGTAGTGGC ACCCCGTGCC  
119501 AGGATAGGAC CCAGAGGAAG GAGGAGTCAA CCATCTAATA GCATTGATTG  
119551 TGCTCATTTA ACCCTGCTA CCTGGCCCCCT CTCAGTACCC CTACCCTCTG  
119601 TCCAATGGGG GGTGACAAG ATGGCCTTTT GGATAGGTCC TACAGCAGGA  
119651 GCTTTGGAGT TTTCAAGCTC TGTGAATCTC TCACGGGCAG TCTCCAGATG

FIGURE 3, page 38 of 188

119701 CCAGAGAGTA GGATTAGTTA TCTAGAGGCA GTGGGAGGGG TGAGGGGCAT  
119751 CATGGGGCCC ATGAGATTGG GGTGAGGGTG GCCCTCTGAA GCATCATGG  
119801 CTCATTTGCA GCCAACACCC CCATACCCAC TCCCATCCCA CAGAAGCTCT  
119851 TACTACTATG TTTTCATTTT CCTCAAGAAT AAAAATTGAC AATGGTTTGG  
119901 GAATTTACTT CCAAATCTAC ATTTTAAATA GCATATTTCT CATCTAGAGA  
119951 TAAACATGAT TTCTACCCTA CACATGAAAG GACATGTCCC GTCATCAATC  
120001 TGTGTAGATT TCTTACCATA AAAAGAGAGC TTGGCTGGGT GCAGTGGCTC  
120051 ACGCCTGTAA TCTCAGCACT TTGGGAGGCC GCGGTGGGCA GATCACTTGA  
120101 GGTCAGGAGT TAGAAACCAG CCTGGCCAAC ATGGCGAAAC CACATCTCTA  
120151 CCAAAATATA AAAATTAGCT GGATGTGGTG GTGGGTACCC GTAATTCCAG  
120201 CTACTCAGGA GGCTGAGACA TGAGAATCGC TTGAACCCAG CAGGCAGAGG  
120251 TTGCAGTGAG CAGAGATTGT GCCACTGCAC TCCAGCCTGG GCAACAGGGT  
120301 GAGACTCCAT CTCAAAAAA GAGAGCTCGT CGCAAAGATT ATCTTAGCTA  
120351 TCTTGGCTTT TCTTTTAA AATAATCCTA AACAATGCAG GATAATTATA  
120401 TCAGCAAAAA TCAAAATTAT AAAATGCCAG TAAAAACCA TATGTGTATA  
120451 TGGTAGCAGA TATTCAAATT AGCTCCAGTC CTTTAAAGCA TCAGCTGTTC  
120501 AGGAAGAGGT CTGAATTCTA TTTCTTCAC TATCTTTGTA TTAGTAGTGA  
120551 GCATTCCCT CTTTGAATGC CAGTTTTCCC ATCTGCAAAA GGCTGGTGT  
120601 TGA CTGGTTG GTCTCTTTCA GACCTGATGA TCTACGCTTG GTTCTAAAGA  
120651 TGGCAAACT GAGGCCACA CCAGTGGGGA GATTTGCCCA AGTGTCTCTA  
120701 GCAGCAGAGT TAGAGCCAGA CCCGGTGTCT GCAGGATTTT AAGTAGCTCA  
120751 GAGACAGTCA CGAAGTGCTC ATGCTAGTCC TTAGCTGTGG CTCAGTGGAG  
120801 GGCTGGAAAT GAGCTCAGTG GGGCAGTTGC TGGGGGTGGT CAGCACCATC  
120851 CTGAGATGGT GAGGTGAACA CAGTCCCTGG CCACACCTGT ACAGGGAGAA  
120901 GCACCTGCAT AGGGAGAAGC TTTCCATGGC CAACCTCCT TTAGTGAGAG  
120951 AGGACTCGTC ATCAACTAGG CACCGTGCTG AAATGTACAT CAACTTGGGA  
121001 GACACTGGCA ACAACCCTAT GGGGTACAGC TTCTACATT AATAAATGAA  
121051 AGCTGAGG TCAGAGGCAG GAGCTCACCT GAGGTCACAG AGATTGATGA  
121101 ACAGCAGAAC AGTTACCAA GACAAGGACT CTGCCATTGC ACATGCAGGG  
121151 ACTTTGTGAG TGATGCTGAA CCTCAGAGTG GCTCATGCTC CATCATCTGC  
121201 AAGGAAAGAT GGTGACAGCT CAGATTGCAG AAGGAAGTGA ATATCAAGCA  
121251 GCAACATACG TCACAGGCAC CTTCTCTTG CTGTGTGTGA TCATCCTGAA  
121301 CCCAGTCACC CTGGGAGGAG TGCAGAGCCA CGTGCCAGT GCAGGGAGAT  
121351 GTAAGGGCAT GACTTGGGCA GTGAGACCAG GAGCTCTGTG TCAGGCCCTC  
121401 CACGTGCTCA GAGAGGAAA TGCCTACATC AGAGCGTCTT CTTGAGCAAT  
121451 GTGCTCAGAG GGTCTTTCTA TGCAGTTCAT TGGTGTATGG GATTCCAGAA  
121501 TCAGACCCAC TACCCCCAGA TACAGCTGCT GGCAAGGGTA ATATAAGTAA  
121551 GTGGCACTCC ATGGCAAAGC TGTGTGCTGT AAGGGTGTGC AGTTCTCAGA  
121601 AGCCAGGGTC AGGGGCCCTC TGCCAGTGTC ACATGTCAGG TGGGACCCGG  
121651 ATTCTCCCCT ACTGGCTGCA TAACTTTGAG CAAGTTATCC TCTCTGGGCC  
121701 TCAATTTCTC CATAGGTCAA ACAGGGATA CACTACTTTG CTCTGTTTTG  
121751 TGGCGTCTCA ATATGTATGT TTGTGCCTAA GAAGGTGTGG TTCAAAGTTC  
121801 CTTCTGCTCC GCCCACCAC CGCCAGCTCC TGCTCTGGGA TCACTGACCC  
121851 CTGTGAGACC ATCACTTCAG ACCAGGAGCT GGGGTTTGGC AGGGTGAAGA  
121901 GGGGGCCGTT TCTAGGTTT TGCAGTAACA CAACTGTAAA GGGTCACCAG  
121951 GGTGTGTTTG GCTTTCTTAG CACAAGAGAT GAGAGTAGCT TGTGTGGGGT  
122001 GATGGATTTT TCATAGGGAA ACACGTTTTT CTCAACTTA TCTCCTCAA  
122051 TGCGCTTCA GATGTGGTTG ATGATTAAGC TAGTTTTAAA GAAAATGAAG  
122101 GACAGAACAG GAGAGGGAAC GCCTGCTGCA ATTATGTCCC TTTCTCCTGT  
122151 TCCTCAGAGA AATCAATCCC CCCTCCTCTG CCGTCTCTCT TCTTTCTTTC  
122201 CTCTCCCCCA ACCTGTCTCT CCCCTCCTCT CCCTCCCGCT CTTCACTACT  
122251 CTCCTTCAGT CTCTCACTGT CTCTGTGTAT CTCTCTTCCC TTGCCCTCTC  
122301 TTGGTCTCTG TTTCTCCCCG CCCCTCGTAC CCTGTCTCTC TCTTTACGTC  
122351 TCTCTCTGAT ACTCTCGTAG TGTGTCTGTG TGTGTACAGT TCTTGTCTCC  
122401 GATCTCTCTC TCTCTCTCTC CCCCAATCCT GTCTCTGTCT CTCAGGCGCC  
122451 TCTGCCCCACA CCTTGCTTAT TCTCCTCCAT GAGCCCGTGT TTTTACCGAT  
122501 GGTGCGATGA AGGCCACATG TTCATGAGTG TGAGCCATTC TCACCGTGAG  
122551 TGCCATTCCC CAGGAGCTG GGCCTTTGTA CTTCTGTCTC CCTTGGGAAT  
122601 ATGCCCATTT ACCAATGGGA AGACAGGCTC CATAGTCCCG AACTGGAGAA  
122651 AATTGGGATT TGCCACTTGA AGGAGAGTTT GTTTTCTGGA AGAAGCCAC  
122701 TGTGACAAGT AATGTGTAG ATAAGTGTG ATCAGGAACA AAACATGTCT  
122751 ATGTACAGTG GGTAAGATGC TCCCAGGCAC TCGAGGCAAA CCTCAGCAAC  
122801 TCAGCCCTGG TCCTGTACAG TATTGACTC TTTAGCCAGC AGCTGGGCTG

FIGURE 3, page 39 of 188

122851 AGTTTTCCAG GGCCAGAGTG CTTGCCGAGG ACCCGAACGT TGCTGCAGCC  
122901 TGAAGGAGTG CCTCTGCCT GCCCTGCCAG CCCACTTAGG ACCGCAGCTT  
122951 GTTTGCAGCT GCAATGGCTC CTGCTATTG CATATTGCT TGGAAATGTG  
123001 TGATTATAAA TCATTACCT CTCTAAAGT GGGTTTAAAG GACCTCTGCT  
123051 GAGCAGCAAG TCCTGGCCAT GCTTCCTTAG CCTAATTGA GTTGCTGCAT  
123101 GTACTGAAAT TAAATTACTT TTCACCTTCA ATGTTCCCA ATTCAGCTGT  
123151 TGCCAACACA GGCTGGCTGT CCTCCCAATT AGCCTGAACC AGCAAGGTCT  
123201 GCCTGCATGG GAAGCTGCGC CATTACCTGC CCATAAAGGG TTCCCTCCTG  
123251 CTTTCTCTGT GAGCTCCAG GCAGATATTC TTCAGCATCT GCTCCCAAGA  
123301 GCTGGCTGTG AATGTGAAC CTGCCTCCTT GGTGTTCAG AAGCACATGC  
123351 TTAAGAGAAC AAATTTTCTT ACAGCAGCGG CTGCTGAAGT GTCCTCTTG  
123401 TGGCCATTGA AAGAACTCT TAGAATGTCT CATGAAATTA TTTTCTGGAC  
123451 AGAGAAATGG CACTACCTGG GGCAGACACA TTTCATTTTT AAACCAAAAT  
123501 TTATGGTTAC TGTCAGGGT AATATTAATG TTTTAAATC CTTGACAAAG  
123551 AAAAAGGAGA AGAGCTAGAA AGTTCTTTGG CTGAAGTTAC CCTTCAAACC  
123601 ATGCCTGAAT TGAGCTTGAT TCTGAACCTG ATGGCACCTT TCCCTGCAGC  
123651 AATAATAAGA ACTGTTACCT AATAAATACA AGGTGCTTAC ATTTAGAAAG  
123701 CTCTGAGCTG TCACATTCAC GATCTCAACT AATTCTATGA CACCTATGCA  
123751 AAGTAAGAAG GAAGGAATCC CCATTTTACA GAAGGGGAAT ATGAAGCCCT  
123801 CACACTGACA TCGGTTGCAG AAGTGTGGCT ACATTTCAAG TGCTCTGACC  
123851 CTGACCGCTG ACCTAGGCT CTTTCTACTG TGTTATGTTG TTACTTAAGA  
123901 GACGATAGAG ACCATGTTGC TGAGCAGCGT GTAGAAAGGG CTTCCACCAA  
123951 GTGCAGATAC AGCAGTGGAG GTCTAGAAAG CAGGAGAAAT TCTCTTTATG  
124001 TTTTGGCAAA GGCAGGATGA GAATTCTAAG ATGACCTGTT TTAAACCTTA  
124051 TAGAATAGCA TATTTCTCTT TGACACATGA TGATTCTTGT AAATGTAAGA  
124101 GAATAAAGCT TTTCTCTCAT GTGGGCTAGT AGATATCTTC TATTCTTCCT  
124151 TCCTCCTGGG CTAAGTGAAGA AAACCGAGAT TTCTTAAATC TTGGTTTAAAG  
124201 AAAACCGAGT GAAGAAAAAC TCTATTTCTT AAAAAGTTT ATTTTATATA  
124251 GTAGCCTCTC CCAGTGTGAT CGTCAAAGT CTGTGTGAGA AGCCTTTCAA  
124301 TGAAATGCTG CTTAAAGCTT TTTTCTTCCT CCATTTCAAT GTTCTGCAAA  
124351 GAGAGGGCTC AGAGATGATG ATGGTGCAC TTGTGCAGGG CTTCCGTTT  
124401 GCTTCAGGAG TCCATGCCTG GGAGAGGAG ACATTGCCCA ATTTGCTGTA  
124451 CAGCAGAGAA GGTGCCACAC CCAGGGAGAG AGAATCTATA TGGACCTCCT  
124501 ACTTAGGCAG AGGTGTATGT GGAGGAAGGT AGAAGGAAGT GAAAGGCAGC  
124551 CAGGTGGCTG GAGCCAGGAT GAGGAGAGCT GGAGATTGA GGTGGGGTGA  
124601 GGGAGAGAAG AGTCCAGAGA AAGACAGCAG GAGTGGACAT TCTCGTTGG  
124651 AGGCCTGGCA GGCTGCAGGG AGGAGCCACA GACAGGAAAG CTTTATAGC  
124701 CAGCACCTCT GTAGTGAGA ATGCTGGGCA AGGCCTTGCC CTGGGTGAGA  
124751 GCCAAGGAGG CAGCCTGGGA GCTGTATAAC AGAAGTGGCA GCAGGAAAGG  
124801 ATTTTATTTT CTGCTGAGCA TGTTCTGCCC CTACCCAGAG GCCCCACCT  
124851 GCCCTGGAGA CCTACTGATG TCTCCCACTA CCATGTCCCG CCTGTGCCTT  
124901 ACTGAAACAC AAAGACTTAT CATGAGAAGC TCCGAAGCAC CAAAAGGAAA  
124951 AGGCTGGATC ATGACCTGGC CTTGGCCTCC AGGCTAAATA ATGAGGCAAC  
125001 TCTGAAGCCA GTGTCAGAGG GTAACTGTG ATGAAAGAAT AGATGATAAC  
125051 TAGCCCATCC ACGGGGGACT GGAGTGCCT TAAATGGTCA GGCTTTAAAG  
125101 AGGGTCCAGT CAGAGCCCCA GCCAGCTTAT CCTAGCCCTT TTATGGGGAT  
125151 GGGTGTAGG AATGGGCTTC TGCAGTCCAC ACACATGTAG GGGCATGTAC  
125201 ACTTGACATC CTGAACAAG CCGGCTTCT GTACATGCC CTTTGCTGGG  
125251 CATTTGTGCT ATCTCTGTAT TAGTTCATT TCTTATTGCT ATGAAGAAAT  
125301 ACCCAAGACT GGGCAATTTA CAAAGAAAAA GAGATTTAAT GGACTCTTAG  
125351 TTCCACATGG CTGGGGAGGG CTCACAGTCA TGGTGGGAGG TGAAGGAGGA  
125401 GCAAAGGCAC ATCTTACATG GTGGCAGGCA AGAGTTTGTG CAGGGGAACT  
125451 GCCCTTTATA AAACCATCAG ATCTCATATA AGTCTTATTC ACTATCATGA  
125501 GAACAGCATG GGAACCACT GCCCCCATGA TTCAGTTACC TCCCACTGGG  
125551 TCCCTCCAC GACATAGG ATGATGGTAG CTACAATTCA AGATGAGATT  
125601 TGGGTGGGGA CACAGCCAAA CCATATCATT CTCCATAGGT GGCTTTGGTC  
125651 CATGACAGCC TGCAAGTTCC TTTTCAATGC TCAGGCCTGG CTCTTTGGCC  
125701 CAGGGTAGTC TGGATTATCA GCAAGGGGCC CAGGAGTCAT CATTCCCAGG  
125751 AAATGCAAG CTTCCCTGTA GGCTTGCTCT GAAGTTCCCT CCTGCCAATT  
125801 TGACAGCTG AGGGATCTCA GAGCCCCTGC CCTCCCTGGG AGGCCTTGGG  
125851 ATCCCCACTG TCGTGCATAC CAACACCTTC TCCTTACCTG CACACCCTGC  
125901 AAGCCATGTG CTGTGGTGAG ACAGCCCCTG CCACCTGCTC ACTCTACCA  
125951 TAGCTGGGGC CCCTGGCGTC TGTTCTGCT GTGGAGCTGT GAAGGCTGTG

FIGURE 3, page 40 of 188



126001 CTGTGGGTGG CCTGGCTAGT TCTCTGGCAG GGAGAAGTGC ACCATGGGCA  
126051 AGGTGAGGGG TCAGCCTCTG TAAGCCCTAC AGCATTCTCT GGAAGCAGTC  
126101 CATTCTGTGT AACTCTTGAG GGCCTGCAAC AACCATGGCT GAGCCCAGAC  
126151 TAACCTCTGG GCAGCCCCTA CCCTTGCCAG TTATGTTTCA TGGGAGCCTG  
126201 ATTATTTTAA ACAGATTCTC CTATTGTTTC AGTTGCTTGT AGTAAATGTT  
126251 GCTCTGCAGC ATTGATGCTA GGGTAGTGCC AGCCAGAAAC CTGTGCAATG  
126301 CTCAGATCTG GCTCTTTGGC CCAGGATAGT CTGGATTATC AGACTGGGTT  
126351 TATTTTCTTT GGCATTGCAG TCTGGCTTCC TGATTATCTT TCAAACACAC  
126401 ACTTGCATGG CATTCCCTTC CATACTGAGC AGATTCCATC AACAGTCTTG  
126451 GGATTCCACT TTTCTTTTGC AATATGGACG TTTTTCATC AGTTTGCAAT  
126501 AGCTGTTAGT GAAACTGGCA CTGCATCTGC AGGCAGACAT CGCCAGACCG  
126551 CAGCACAGTT CATCTTCAGA TGTTTTCCTT TTCCATGTTG GTGGCAGCTT  
126601 CCTTGCTCC TTCCCTCCTT CTCAAGATAA ATTCCCAAA GCTTGGACCC  
126651 AGCACTTTCT GCCTATTCTC ATGGTTTTTG TTGGGGTATG AATGCCTTAG  
126701 ATGGCACAGA GAGGCATTGG AGATTTACAG CCCTTTTTAT TATGACTGCA  
126751 CTGTAGCTGC TGTCACGA GCAGACCTCT TCCTTTTGAT GACAGGTCAA  
126801 TTGGTCAATT CCGGGTTGCT CTGTTGGCTT CTTATCAGA CTGTAAGCTC  
126851 CATGTAGGTA GGGTCTATGT CTGACTTGT CACCCTTGTG AACCAGACA  
126901 GTGGTCCAGA GCTTGGCACA TAGTGAGCAC TCAATAAACA TTTATTGAAT  
126951 GTACAAATAA ATAGAATGTT CTTTCAAGCT GAGCAGCTGA CTACCTGTGA  
127001 TGAGTTCCTT TAAAAAAGCT TAATAGCTTT TTTTTTTTTT TTTTTTTTGA  
127051 GACAGTCTCA CTCTGTCAAC CGGGCTGGAG TGCAGGGGCG CAATCTTGGC  
127101 TCACTGCAAC CTCTGCTTCC CAGGCTCAAG TGATTCTCCT GCCTCAGCCT  
127151 CTCAAGTATC TGGAACATA GGTGTGTGCC ACCATGCCCC CTAATTTTTT  
127201 GTATTTTTAG TACAGATAGG TGTTTTGCCA TGTTGGCCAG GCTGGTCTCA  
127251 AACTCCTGGC CTCAAGTGAT CCACCCACCT CAGCCTCCCC AAGTGCTGGG  
127301 ATTACAGATG TGAACCACCG TGCCTGACCA ATGCTTGATA GCTCTTGAAT  
127351 GATCAGTCTC AGAAATAAAA CTTGCAATCC AGATTAACGC CAACCAAGAG  
127401 TTAAACATCT CAAGGCCAGA GAGCAACATG CTCACTGCTC ATGGAGTCAC  
127451 ATGTACTGAC CTCAGGACAT CCTTGGTAAA CAGCGCAGTG CACAGCCCT  
127501 GGCAGGCTAG CTTGTTAGGG CTTATTAGGC CAACAGCCAC GGTCCCTTCC  
127551 AGCCTGGGTT CCACTGGAAC CCAGCGGGTT ACTCGGACCG CTGCTATGTC  
127601 ATGGGCTGGC CTGCCTTCCT CCACACACCG GGCCGTAAT GTGATGTGCG  
127651 GCACCTGCTG TTTGGTGTG GGAGCTGCTC TTTCTTGGA AGTTTTGCTG  
127701 AAAGGTAGGT GAAGCCTTAG GGAGAAATCT CATTAAAAA TCAAGTTTCC  
127751 ACTTCCCAGA GAAACAGAAG AACTATCATC CACTAAAGCA TTTCTTCAGG  
127801 ATCATGAAGA AGGTTATTCA GCTGGGGTGG CAGCATCCGG AGCAGAGGTT  
127851 TAAGGTCTAG ATGTTAGATT GCAAGGGGAC TGCCCAGAGG CCTCGCTGGG  
127901 GAGAATACAG TGGAAAACAT TGAGGCAGAG GAGATCCTGG CTCCCACCGC  
127951 GTCCATACCA GGGCTCTGTC ACCCTCTCTC CAGGAGCTGG GCCACAAGT  
128001 AGAACCAGCT TCACGTTGAT CCAAGCCAGG TATAACCAGG ACAAGGAGTG  
128051 GCTGGGGTGT AATCAGAGAA TGTCCCCTTA GGCAAAACCT TGGTGACTTT  
128101 GAAAGCCATG TGTGCTATTC CAGAGGTCTC TTATACCCAC ACCTCTCACC  
128151 TTCAGTGCCG CAGGATGACC ATGAAGCACT TTGGTGGTAT TTTAAGTGCC  
128201 TCGGTTTCTG CGAGAACTC AAATAGTAGT AATGGCAAAT ATTTACATAT  
128251 GGCTTATTCT GCACCAGGTA CAGGTCTCAT GGTGAAAGGT TAATATTATG  
128301 GTCCCGATTT TGCAGATGAG GAAACGGAGG CTTACAGAGG TGAAGTAATT  
128351 TGCCCAAGGG CATCAGGCCA GTTAGTGGT GAGCTGAGAT TTGAACCCAG  
128401 GCAGTCTGGC TCCAGCCTGT GAGTCCCTCC CCATCTGCCT ACTGCATGCG  
128451 GGGGTGGTAT GACCAGCAGG GTCAACTTCG CCTGGGGTCC ACATCTGCCT  
128501 TTCTCCCTTG CATTCGGTGT TAGGTCCTGT CACAAACATT GTCCCATTTG  
128551 ATCCTTATAG GGAGGGTAGA GTGTCCCGT CTTTCTAAT TTTTGGAGT  
128601 TTTTATTCAA TTTATTTTGT TTAAGCAGAT AAAAGACACA TTAGCCACAC  
128651 TGCTGTGCAT TTCCCAAAGA CCACAGGAAA AAAACTCAAA AACTCATGGC  
128701 ATTAACATAG TATTTTCAAT TCTAACAGCT TTATTGGGAT ATAATTTACA  
128751 TGCCAGAAAA CTGATCCATT TTATGTACAA GTCAATGATT TTTGGTCTGT  
128801 TTGCAGAATT TTCTAAAATT AGTTTGTAC TACAATCTAA TTTTAGAACA  
128851 TTTTCATCAC CTGCAAAAGA AACTTGATGC CGATATCCAG GCACCCCAT  
128901 GCCCACCCCA GCCCTAGGCA ACCCCTAACT CACTTTTTGT CACTGTACTC  
128951 TTGCCTCCTC TGGGCATGTC TCACATGGAC TCATACACAA TGTGTCACTT  
129001 TGTTTCTGAC TTTTCCACT GGGCACAGT TTCTTGAGGT TCTTCCATGT  
129051 TGTTGCATGT CTTTGGTTG CTGAATCATA TTCCATCACA TGTGCCACAT  
129101 TTTGTGCATC CGTTCATCGG CTGATGAACA TCTTGGTTGC TTCCACTCTT

FIGURE 3, page 41 of 188

129151 TGGCTATTGT ATTACCCTCT TTAGATGGAA AAAGAACTGC ATCCTAGAGA  
129201 AGTCTTACGG CCTCGGTATA GACATCATCA GTGGAGTCTG GCTGGCCCAG  
129251 GCCGGTGCCT TCTGGTTGAT TCACTCAAAA TAGGTGTCGA AACTGACACC  
129301 TATTTACTCC TTTTTTGTGC CCAGCACTGG GCTCAGCCCT GGGAGCCCTG  
129351 CAGCAAGTAA GACGCACATG GTCCCCGCT TCATGGGATT GTCATGCAGG  
129401 CAAGCAGTAA GTGAGCAAAAT CAAGGCAGGT GAGTGTTAGG TAGTGATGAG  
129451 TGCTGGGAAG GAAATCAAAAT AAGATAATGT GGAGACATAT AATAAGGACT  
129501 TTAGAATTTT TCTGCTTTTT AATTTTAGTT AAACCTTCTCT CAATTTCTAC  
129551 CCGGCAGTAG ACATTTCTAT TTTACTTAAA GAATTATCCA AATACATTTT  
129601 ACTTTACATG GAAAATGTGC AAAGATTTGA GAGGTGAGAA ATCATTTTTTA  
129651 TCTGTATGCT TTAGGGACTG AGACACTGCT GTGGATGGGG CGGCTTCTCT  
129701 CCATACTTTG TGGGGTCAGT GAAGGACTCC TCGCTTCCCT CTGCCACCCC  
129751 TGCTTAACAA GGCACCCTCC TTCCCATTTA GCAATCCGGG TCATCGCAGA  
129801 GGCTCAATA GCCCAAGCA GAAACTGCAC TCGTGTGTGT GAGCAAATTA  
129851 CCCCAGTTAT CTGGCCATGT AGAAAGCTAC AGTTTTACTC TTCATGAAAA  
129901 ATTAAAATCT TGTCTGATC TGATGTAAGG AAAAGGATGA GGCAACTTGG  
129951 AGGAACTCAG CTATTGTTGA TCAGGCAGAT GATAAACTAC ACATTTTCTT  
130001 GACTCAGGGG ATCAATGGAG AATCTTAGAG AGAAACTCAC AGAAGAAATT  
130051 AAGATTAAAT TTGCAAGCCT GTAATATGGG GAATGCATTC TAACAACCTAC  
130101 AGCAAAATAA GGCTCTCTCC TGAAAATGCA TTATTTATCC CCGCTGTTA  
130151 CCACAGCTAC GGATGCTCCT TCCTGTGGTC TGAACCCGAG TGGGTTATGG  
130201 AAGCAGTCCA GAGACAGACG ACTTGCTCAC CAATACAGTT AGAATTTTCTAG  
130251 ATGAGCAGTC AAGATATTTT TAAACTGTTT GTGTGTATAG CCACACCATA  
130301 AATCGTGAAG ATGAAGGTAG CTGAGTGAGC CTAAATCCAA ATGGGGCCAC  
130351 AATGTGGGCT TTATGCAGCA TACATTTTAT TAAGAGAAAA AAAATCAGGG  
130401 AATCGGTTAT GTGGCTCATT CCCACACATT TTTCATTAGT AATATCTTGG  
130451 AAGAACATCA AAAGTGGTTG CTTGGTTCAA TGGGGACCTT CAGTAGAAGA  
130501 ACATAATTTG CCTCCTAATG AAACCTACTC ACACAACGAT ATGTACCACA  
130551 GTGAAAAATC AGGAAGAGAT ACTTGATGCT CTGGCATTAA TGATTGGCGT  
130601 CTCCCTCAGA TGTCATCGCT GTCAAAGCCA CACTGGCCAG ACAATGGGAA  
130651 CTTTCCAGTA ATTGAAGCAT AAAGTGACAT GAAATGTCCC CAACAAGAGG  
130701 TATGCCTCAG TACCTAAGAC AGAGTTATTA ATTTAATTAT TTGGGCAAAT  
130751 TTCTGTCTGA ATTCTCTGGA AAATTGGCAC TTCTCAGGAA AAGAAAAAAA  
130801 AACATTTTTT GCAGAGTTTT GAAGATAAAG TTTGAAGAAG ATGCTTTCAG  
130851 AAAAGTTGCC GCCCAAACCA AATAAAATTT CAGCAGGTTG TTCTCTAAGA  
130901 GAAGAGAAGC AGACAAAACA TTAAAGGGTC ATTTTCCCCC CGTGTCTTCC  
130951 TGAGAAGAGA ATAACCTGAG TCCATTAAGA GCGGGGTTTT GGGAAATCACA  
131001 CAGCACTGTT TGATATGCAA CTCTGGTGGC CTTGGGCAAG CCACATGTGC  
131051 TCTCCAGCCT CAGTTTCCTT ATTTGTAAAT TGGGAACATA GTTAAACCCT  
131101 GTCTCCATAG GTTTGCTAGG AGGATTAAAT GAGTTGTATG AAAATCATTG  
131151 AACACAGACT AGCAGGCCTA AAGTAAATGC CCAACATAAT GGTAGTCTAT  
131201 TGAAAAGACC TAAAAAGAAT GGAATTTGTT AGAATAGTAG AGCAAATGAG  
131251 AGAGAAAATG GCTGAACTGC TTATTGGTTA TCTGTGAGAA ATTTGACTCC  
131301 TTTCTTTTAG AAATCAGAGT AGTATTTGTA TAAGCCAACT AAGCTATCTG  
131351 CAGATTTGAA GAATATATTT TAAGCTTTTT CTTTTCTTTT TTTCTTTCTA  
131401 GATTTTACT CACTAATAAT TATTGAATCA TTTAAACATA TTTTAAACCA  
131451 AATTTTAAAC CTAAATAGTA GGTAAACATC TTCATGTCAA TAGTATTAGT  
131501 TTGCTTGCTT CTTAAGCAAA ATGCTGACAG CAGAATAAGG CTGCAGGGGC  
131551 ACAAAGTCT TCAATAAGAA AATGATTAC TGAGGACGTA CTGTGTGCCA  
131601 GATGCAGCCC CCCCCCAGA TGTGAGGCA CTTGCCTAA GAGGCCAAGG  
131651 TCATGGGTGT AAACTTTAGG TGGGTCAGTT AGATTCATTC TGATTGGCTT  
131701 GATCCTTCTT CAGGTGAAGA AGGATCCCAT GACCACCATA TATGTATATA  
131751 TAAAGATGGC TCAATGAGTG TCTACTGAC TCGGGGTCAG TGAGGTCCAC  
131801 TCTACAGAGA AAGGACAAGC TCTGACCCTT GAATAGGGGA ATTGTAGTTG  
131851 GGTAAATAGG GCTCAGAAGG ACATGTTGGA CATGGACAGA GATTTCTCCT  
131901 CTATCCTGAG AGAATGGACA TATGTAGTG AAGGTGGAAA TTGACATCT  
131951 GTGCACTTTT TTTCTGTGTG AGTTTACCAA GGAGGTAAGT GGCTAGGCTA  
132001 TAAAAAATTC ACAGAACCAT TCTCCACAAC AACTTCTCTC TAACTAGCTT  
132051 TCCCATCATG CATGAATATT TACACCTGCT TAAAATGCTG GGGATTGGAG  
132101 GAACAACTT TGTCTCAGT CTAAATTTT CCTGAGAGCT ATGAAAGCAT  
132151 TGGTATAACA ATGTGCTGCT AAACCTGAGG CCTTGACCAG TGTTCATGTC  
132201 AAGCCCATGT CAGCCATGCA TGAAAACCAA ACTGCAATGT GGTATACACA  
132251 AGACAAGGCG GTCGAGGGGC CATAAGCTCG TTGCCAAGA TGTAGCACTC

FIGURE 3, page 42 of 188

132301 ACTAGCCGCC CAGTTCCCTC ATCTTTTTGT AACTGAGCTT AATGGAATTT  
132351 GCCTCAAGCT GAATGACAGA GCCTCCAAAG GTTTGGAGAC TGATTCCATT  
132401 TGGTTTAGCT GTTCAGCAAG CCTCTTATCC GGGAGTGATG ATCTCATTTT  
132451 TGCCCGTTTT TGCCCCAGCA GCCTCTCTCT TCACACCTTT CTGCTGCCTT  
132501 CAGCACCTTT CTTTGCCTCT GCTACTTTCC TTTTCTCTCG TCCTCCTCCT  
132551 TTCCTGAACT TTGCTTCTGC TGTGCACCCC TCACCCACCT TACCCTCCTG  
132601 CCACCTTCTC AGAGAGCCCC ACAAGATAAG CCTTATTCGC CCAGACTCCT  
132651 CTGGAGGGTG GACATTAAAA GCCAGTTCCA CCACTCAGAG CTCCTAGAAG  
132701 GCAGGAATC TAACACACGC GTGAGAGCAG GGTAGCAGAG GTGGCTCACG  
132751 AATGCAGATT CACTCACAGG CAAATGTGTG AAGTAGCGGG GAGGGCTGAT  
132801 TATGCAGACC ACTCCAAATT CAATCTCCCA GTTTATGTTA TCACAGGAGC  
132851 TCATGATGGA AGCACCACCC GATAATTCCG ACTTGCTTAT TACTTATTCT  
132901 TTATCTAGAG GAAATAAAGA GAAACAATTA CCTTGGTGTG ACATTCTGCC  
132951 ATCTCTACAA AGCCACCTGC ACCTGAGACT TTGCCAGCAG CAGAAATAAC  
133001 GAGTTAAGTG CTAATATTTT CATAGAGAAG AGAGTAGCAG GGCTATTGAA  
133051 AATAAATTCA AAAGACCTTC ATGTATTCTG GTCATATATC CCTGGCATAA  
133101 AACTTCTCCA GAGATAAAAT AGCTTTCTGA CAGGAGGGTT GTGGCAGGGG  
133151 AGGGGGAGGC ACGGTACAGG GAACAGGGAA GGCAGCCCTG GAAAACCCTC  
133201 CTGGCCTCCC CGTTCCCACG GTCGGACGCC GCCTTTGTGA AAGCATCTTT  
133251 GAAATGATTG AGGTTGAACT ATTACTGCAG AGCCCTTTTC AATAATGAAT  
133301 TTTAAATTAT AAATGACATT TTGGTGTGTG CCCTTCTCTC CCACCTATTG  
133351 GTAGTTAACT GGGAAAATTG ATGTGGTTTT TGTCAGGACG GAGCAAATTC  
133401 TCGGGAACAG GAGCCTGAAG CTTAGTTTTA GTTCTTAATC GAGACATGTG  
133451 ACGGACGTCC AGCTCCCCTG CTTCCCATAC TTAAATGCCT GCCCGGGCCA  
133501 TGTCCTGGGG CCAGCCTGGG CTGCACACGA GGCTCACAGC CTGCTTGTGA  
133551 CACATGAGCT GAGGCATTCC TTTTATTCTT CTCTCTGCTG AGGACAGCCT  
133601 TTGGGAACCT AACATTAGGA TGACTTCGGG GCCACGGAAT GACTTGGGTT  
133651 TCCCCGCGAA CACTGTGAGG CTGAGTTCCC CCATGGGTGT TGGGAGCACC  
133701 GGGAGGAAGT GGGTGCCATC AATTAATAAT ACGGGCCTCG TTCATGAGAT  
133751 ACTTATCAGT CAAAACCTGCA AAGCAGTTGC TGTTTGTTTA CTGCGTTTAA  
133801 AGGAAGCTGC TAAGACAGAG GAGAGATAAT TTAAGAGTAA TCATTGGTGA  
133851 GCCAGTCCTT TCCACTGACC CTGGTGCTCG GAGTTTTCTC TCATTGCATC  
133901 AACCATTTTT GGCAATTAGA TGTGCTTTCC TTATTAATGC CAGGGTAGGG  
133951 AAGCAGAAAA TGAAGGCTCT TCCTCACAAG TAGCTGCTTA ATGTTGCAGT  
134001 GCCTGCCTGT AAGTCACGAA AGCCATGGAG TTTTGCCCAT CCTTGAGCAC  
134051 AGAATGCCTT TAATGACAGC TACAGAATAG AACCATTAAAC AGAAATGAGC  
134101 AAATCCTGGC ATTTTCCACT GGCCTGTGCA TTTCTCAGTG CACTGATGGA  
134151 GCTAGGGACA CTCCTTACAG GGGGCTACAG ATGAAAATGC CCAGCCTGAA  
134201 CCTGTGTTCC GGGGGGTGCT GTGCTCTCTA GCTGGGCACT GGCATTGCA  
134251 GTTCTCAGCA AGAGCCTGGC CCTGTCTCCC GTTTGTTCAT TCTTGGGCAG  
134301 CATGCTGGA GGACATGATG AGAGAGGGTG ATGCAGGGGT CAAAACTGG  
134351 GGCAATGGAG GATTGTGTA ATGTCCAT CCCTGGTTAT TAGGCACAC  
134401 CTGTATGCAA GAGGCCACCC CAGATGCTGC ACTCCCATG TCTCAGCTCC  
134451 CCCTGAAGAT GAGCCTAAGG TGGAAGAGAA ATACAGCAGG CGGAGTTGAG  
134501 GTGAGATTGA GAATCTGTTT TCTTTACTGT GGGTTAGATC ATACCATCCC  
134551 TGAGCAAGA TGACATGTT TGGCTGTGTC CCCACCCAAA ATCTCATCTT  
134601 GAGTTGTAAT TCAAATTGCA ATCCCCATGT ATTGGGGGAG GGACCTCATG  
134651 GGAGGTGATT AGATTATGGG GGCAGCTCCC CCATGCTGTT CTTATGATAG  
134701 TGAGTGAGTT CGCAAGAT CTGATGGTTT TATAAGGAGC TTTTCTCTC  
134751 TTCCTCTGC ACTCATGTG TCTCCTGCCA CCCTGTGAAG AGGTGCCTTC  
134801 TACCATGATT GTAAGTTTCC TGAGGCTTCC CTAGCCATGG GAAACTGTGA  
134851 GTGAATAAA CCTCTTCCCT CTGTAAATTA CCCAGTCTCA GGTATTTCTT  
134901 CACAGCAGCA TGAGAACAGA CTAATACCTA AGATTTCTCT AGAGATTCTA  
134951 TCTCTGTTAT TACACCTTTC TTAGAGATTC CAAATGTGGA AGACTCCTCT  
135001 ATTCAGCAT ATGTAGGTAA TGTGTTGACG CGGAGGCAGA GGTCTGGCCT  
135051 AATAACCTCT TGACCCCTTA AGCAGTTGGG CAGCCCTCAC CACACACTGC  
135101 ATGTGTGGTG CTGCAGCGTG TGCTGATGGC TGTTCAAGTG GTTACGGGGT  
135151 CAAGCATGAC TGGTCGGTGC TGATCTCAGA CCATGGGAGG GACACACTGC  
135201 ATGCAGCTAG GAGCCACTTT GTCCAGTCAC GACCAAAGGG CCAAGCATTC  
135251 TACCCTGTCT CTGATACTGC AGACCAGCTG GTTAGGAGTC AAAGTGCCAA  
135301 GCAGCTGACA TGCTTTGACG TGTCACCTGT ACAAACACA CCATTGAATT  
135351 TTTTTTTTCT TTTCTTTTCA AATCAGAGTC TCTCAATAG CATCTGAAAA  
135401 CTGTAGAAAC AGAGCACTAG ATTACGAACA CATTGGACAG GCAAGGTTAT

FIGURE 3, page 43 of 188

135451 CTTCTCTAGA GAAGAAATCA ACAGCTGCCC CTACTGGGAG GAAAAGTGTC  
135501 TAAAGAAACA GGGAGGGGAA GCGGTGTCAG AACTGGAAGT AGGTGATAAA  
135551 CCCTGCAGGA GTCACAATAG CCTTTGCTGA GAAAGCAAGG TCATGGGCAG  
135601 GAGCTCCCCC TGCCATGGCT TGTGAGTGTG AGTCCAGGCA AGGTGAACAG  
135651 TACAAGAGTC AGGGCACAGT GGGACTGGGA GTACAGGCAC CAAGGCCATT  
135701 GCCCTCCAAC CCCTGCTACA CACTCAGGGA CCTTGGGAAA ATCACATCCC  
135751 TGTTCAAACC CTGGTGTATT CATCTTTCAA GGCTGGGGTT AGACTTGATG  
135801 ACCAAGATGT CCTTGCCATG TCAGCATTTG GATGGTCTTC TATCATTTGT  
135851 CTATAAGCTG ATTCTGAAAG TTGAAGACAA ATAAATCGCA TTTACATTAG  
135901 TATGACTGTG AGATGCCAAT GTTGGAGAGT CAAATCATGT CCTAGTATTT  
135951 CATTTAGTTC TCTATGCATC CAGCATACCA ACTCTGAGCC ATTCAGTGAA  
136001 GACTCTTTTC TGGTATCAGG CTGAAATAAA TTCTCCTTTT TTACCCTCCA  
136051 TCATATGCCT TCCACATATC CTCACATTTT CTAGGCATTC ACTAATATGA  
136101 TTTCTTTTAT CATCAGTTGT GTTTTTTATG GAGTCCTTTC TTCTGGAGCC  
136151 TCTTTTCTT ATTCTAATCT AGAATGTTCT TTTTGCTCGC ACTCTCCTTC  
136201 CCAAGTTATC CTGAATTTCC TTTCTTGGCT TGCATTTTCT CTTTTCTGGG  
136251 GTACACCCTT ATGTTATTTT CTGAGAAAGT GTGCACAGGA GTTCCACTTT  
136301 CTATTACTCA CATATTTGAA AATGCTTTCA TTCTGTACTT GTACTTGATT  
136351 GACAGATCGG CTGGATATAG AATTCCAGGT TGAAATTTTT TCTTCTAATA  
136401 GTCAAGATAG TATAACTGCT ATATAACCCC CAAATATCAG TAGTATAATA  
136451 CAGTTTATTG TATACTCACA GCACAGCCTG CTCATTCCCC TGATGGAGTG  
136501 CAGGAGTTCT CTAGTCCACA CGGTAATTCT GAAACCAGAT TCCTTCTATA  
136551 GTGTGGCCCC CAAGGTCAC TATGACAAGG ATGAGAGGGA GATTTGAAAG  
136601 AACATGGAAG AGGCCCAGCA GCTCTTAACT GATCCAGCCC AGAGGTGACG  
136651 TATCATTCTA CTCACACCCT GTATGTGAGA CCTAGTGGAA TGGCCCCCTC  
136701 TAGAGCAAGG GGGATGAAAA GTGTAGTGT TAACTGTGTAT CCAGGAGAGA  
136751 AAAACCACAC CGTCATACTT TTAAAGGCAT CATCTTTAAG CAAGCAGTGT  
136801 CATTGGTAAA AAGTCCAATG CTAGACTGAT CCTTATTCCT TGTGGGTGAC  
136851 CCATTTAATC TATCTGGAAG CTATTAGGAT CATCCCTGTG TTAGTCCACT  
136901 GAGGCTACTA TAACAAAATC GCATAGCCTG GGTAGCTGAT AAACAACAGA  
136951 AATTTAAAT TTCGGTGGCT GAGAAGTCTA ACATCAAAGC ACTGGCCAAG  
137001 TCAGAGTCTG GTGAGGGGCC ACTTTCTGGT TCATAGATGG CACCTTTCAG  
137051 CTGTGTCCTC ACATGGCAGA AGGGGCAGAG GCCTCTCTGG GGTCTCTTTT  
137101 ATGAGGGCAC CAATCCCATC CATGAGAATT CCACTCTCCT GACCTAATCA  
137151 CCTCCCAAAG GCCCCACATC CTAATACCAT CACCTTGGGG GTTAAGATTT  
137201 CAACATATGA GTTGAGGGG ACACAGCATT GGGACCAGAG CAATCCCTTC  
137251 ATGAACCCCT TAAGGTTTAT GAGAGTAGAA GCTGATTCAC TCACTTATCT  
137301 CCAGTTTCTA TGCCTGGCAC AAAACAGGGC GAGGATCAGA GTGAGGCAAT  
137351 TGAGGTGCGT GCCTCCAACA CAAAGACGCG GTAGTTAAAA CAAATAATAT  
137401 TTTAATGCAA TATTTTACAA ATCAAAATTA ATGCAAAAAA ATCCATGATG  
137451 AACAAAATAA CATTAATGTC CTTGATGTTA TAAATTTTG CAATGATGTG  
137501 TCTGACTTTG TGGTTCCTTT TGTGGGTCCT TCAGCCTAAA GACATATATC  
137551 CTTCTCAAAA TAAAGCAAT TATAATTTT TTAAGCAACT TCCCTCTTCT  
137601 CAGGTTTCTG TCTTTCTAAA AATCTTAATT GCATGTGAGA CCTCCTGTAT  
137651 CAATATTTTC TGTTACTTTT CTCTTAAAGT GTCTGTCTA TATATTTTAT  
137701 TCTATATTCT GGAAAATTCT CTTGGCCTTA TCATCTGATC TGAGTATTGA  
137751 ACTTTTGTG TCAAGACTCA TGTTTTTATT TATTTATTTT TATTTTATTT  
137801 TATTTTATTT TATTTTATTT TATTTTATTT TATTTTATTT TATTTTATTT  
137851 TATTTTGTAG GCAGAGTTTC ACTCTGTGTT CCCAGGCTGG AGTGCAGTGG  
137901 TGCAATCTTG GCTCACTGCA ACCTCCACCT CCTGGGTTCA AGCGATTCTC  
137951 CTGCCTCAGC CTCCTGAGTA GCTGTGATTA CAGGCACGCG CCACTACTCT  
138001 TGACTAAGTT TTGTATTTTT AGTAGAGACG GGGTTTCACC ATGTTGGCCA  
138051 GGCTGGTCTC AAATCCTGTA CCCAGGTGA TCCGCTGCC TCAGCGTCCC  
138101 AAAATGCTGC GATTACAGGC GTGAGCCACT GCGCCCAGCC TAAGACTCAT  
138151 GCTTTTAATT TTCAAGCACA CTTTCTTGCT TTCTGATTCC TAGAAGTGGC  
138201 ATCTTGTTGA AACCGACTGA GGATACTAGT TTGCAGTGTG TGGCTTTCTT  
138251 TGGGAATTAT GCTTTTACTT TTAGTTTTCT TCTGTCACAT GGATTATCTC  
138301 TGTTTGGGTT TTATTTTTAG TCAGCTGTCA TTGTTTGTTC ATCTGTTTGT  
138351 TTTCAGCTCA TCTGTGGTAC TGCTCTGTGT GTTTTCTGTT GCGGGTCTGG  
138401 CAATCTTGG TTGTCCACTC CAATACGGAA GTAAGGACAG CACAAGGGTT  
138451 GACTGGAAGC TCTTATTCCA GGGCAGGGCC TGTCAGCTGG CAGTTTCCAC  
138501 TTTAGGATGA GCAGGCTGG AGCTGGGTGT CAGGTAGCA GCCCCTACGC  
138551 AATGCCCTTC CAGAGTATGG AAGGTGCTAA CACCCACAGG AACCACCGTG

FIGURE 3, page 44 of 188

138601 GTTCTCTGCG GGCTGTGGAT TCCATTTCTT TAGGCAAAAA ATTCTTCTGT  
138651 TTTTTTTTTT TGCATAAGAG AGTTTTCCAC ATATAGCGCT TCAATTTTTT  
138701 CCCATCCTTA TCTTGACTGT GCCTCTGAGG GAGGTGTTAT TTGAGGTGG  
138751 GCTCCCTGTA CGGCGGCTGC CTCTTCTGCA TATGTTCTGG GCTGTGGGCT  
138801 GTGGACTGAG GTGTCCTCTG TCCTGTGCGC CAGTGAATGT TCTGGAAATG  
138851 TACTTAAATC CCTTGCTCAC CAAGGGTGCC TCTTCCAATA TCTTTACTGT  
138901 TGTAATTTAC TCTTTTAAAG ACATTGTAAT TGAGTCTCAG CAGGCGAAAG  
138951 AAATGCATGT ACCTACCCTG TCATTTTGAA CCCTCTCCTT TTGTTTTTAA  
139001 AATGTTTGAA ACATCTGGCT TTCTAATATT AGTATGTGGC ATTCCCAGTT  
139051 TAACATGCCC AAAGCAAAGC TGTTCATCC CCTCTGCCAG GTCCAACACT  
139101 ATCTGCATCT CCTCCAGTCA TGCTGGCTGC AGGGAACAGC ACCAAAATTC  
139151 ACCCACTTGC TTAAGTGGGA AAAGTGGGTC ATCTGTCATT CATCCCTTTC  
139201 CCAAAGCCAC ATCTCAATGC AGCTCTGGTT ATGAGCTCTT GGACTGTTCT  
139251 CTTCTCCTTG AGCAGATCTT GCCAACAGAG TTCCTGGCTC CATTGCATCC  
139301 CTGGCCAATG CAGCCCACGG TCTTCAGAAT TGGCGGCATT GGGTCTCCCA  
139351 GCACACAGAG GAGAATCTAT CACCTTGATC GCCATTGCGC CTCTTCACAA  
139401 TCCGGTCCCT AGGGGTCTTT CTAACCTTAC CTCCCTCTGC TTTCTCTGCG  
139451 CTCCTGCCCT CTGGCCAAGT GAGACCAGCA GTCCCTCTC AGACACATCT  
139501 TCTGCTTTCA CATGTCTGTG CATTTGTTCA GCTTGAGATG CACTGACTTC  
139551 TGTGCGGTCA GTGCAAAAGT AATTGTGGTT TTTGCAATTA AGAGTAATTA  
139601 TACCTGCCTT TCAAATACTG CCCTTCCTTT AGGGCCTGGA TTAAATGCTA  
139651 TTTCTCAAGA AAGTTTCATG ATTCTGTCAC TTGTAGGGAA TCTCTCACCC  
139701 CCTCCACCCT CTCAGCTCTT CCCTCGTGTG TGTTATTGTG TAACGTATAG  
139751 GTCATTCTGC ATGTTGGTTG GGTAGCCGTC TGTTTCCCGC ACTGAGCTGG  
139801 AAAGTCTCTG AGGTGAGCTC GGTATAGCT GGCCTGCCTG TCAGAAGTCC  
139851 CTTGGCAGAG GTTGCAGCAC AGGAACAACT GGGGGAGTTT GCCCGGTGCT  
139901 GCCACACTGA GTCTCAGGTC TGGGACCTGG ACCTTAGGCT GGGGTGTGGC  
139951 TTGCTGAGCA GCTGACCTGC GGCCTGAATG GTGGTGCTGC TGATACAATG  
140001 CTGACATGGC TAGAGGGAGA AAAGGCAGTG GCTCCGTGGC TTGGGCTCCT  
140051 CTGCCCTAGA GGGCAGGTCT AGTAATTCTC TCAGAGAAAC TTCGAGTCGG  
140101 CTTTCATAAG AAAACAGAGG AAGAGATGAA GCCACAGTCA CTTCTTCCA  
140151 TTCTTAATC ACCCTAATAC TGCTGATCAC CTGTCTTGA AATGAACCAA  
140201 AATACAGACA GCCACAAACC ACATCCAGCT TATCATTCCC ACCCATCCTG  
140251 GACTGTGGCA CCCAGGGTCT GGTCTAGCT CAGTGGGATG GAGTCATCTG  
140301 CAAACCAGGA GAGCGATGCC CTGGGGCAGG GACACCCACA GGGCACTAAG  
140351 ACAAGAGCCA CAGAGCCCTT GTTGGTGCCC AGAGGTCTCTG TGCTGGGTGG  
140401 GCAGGCCTCC CCCTGCCTGC CTCCCCCAGC CTTCCCCATG GTGGGAAGTA  
140451 ACTATCTCTT ATTTTCATCT TCCCAGCAAG AGGAGCTACA AACAGGCTAC  
140501 CAAGTAAGTC ACCTGGTGCC TGGTACACCT TCCCCTTGCT GAGAGGCTCC  
140551 TGCTGTGAG AGGACAGGCA AATTGCTCCA TAAATTATGA ACCTGGAATG  
140601 AATCTGCCAG GCGCCTCCTG TGTGGGGTTG AGGTTGTTCC CTAGGAGTGC  
140651 CCCATTCTGA AGACAATTG TCTAATTGCT TTTGTTATTT CAGAAAACAA  
140701 ATTAAACCAC CCGAGTGTTC CAAGGTAGAA AAACGTCTGC AATGTATAAG  
140751 AAACATTTTA GGAGTGTTTA GTTCACAGCC AGCAGTGTCT GAGCAAAACAG  
140801 CCAGAAAGCA GTCACCAGGG AGCACAGGCT GCTCAGGAGG TTGAGGCCTT  
140851 TATGAGGTGA GCCGTGTGCT CCATCGGGGT GGGGGTGCAA GCCTCTACTC  
140901 CTGGCTTCTC TGAGGGAATC CCTGCCCTTC TCTCCCCCTT GCCTGCAAGA  
140951 CCTATGATT CTGTCTTCTG CCCATCCCCT CCGTCACAGC CTTGACTCAG  
141001 GCCCACCCTC TGTGACCCAG ATTTCTGCAG CAGCCCCTGC TGAGGTCACT  
141051 GTCTTCCTCC CAGCTGCCCT CTTTTCAGTC GCAGTAGGGG CGGCCCAAGA  
141101 CACAAGTAAC ACAATCAGAT CATAATTTGC CACTTCTTAA TGGCTTTGTG  
141151 GCTTCCTGTA AGCTAGGAGA CAACGTATCA GACAACCCTT GGCATCAGGG  
141201 AGGGGAGAGC CAGCCTCCTC CTGCAGGCC AGCCGTGGGA AACCTGGCTT  
141251 CTCACACCTT CACTCTGTCA TGCCACTGAG CCTCTGTCCC AGGGAATGCA  
141301 GTGGTGATCA CACACACT CACACACACA CACACACTCA CACACACTCA  
141351 CATATACTEA TTCTCACACA TGCTCATATA CACCCTCATA TACTCACACA  
141401 CTCATATACT CACATACAG CATACTCCCA CACTCATACA CTCACTCTCA  
141451 CACACATACA CATATAACA CACACACCCA CATAATATT CAGACATATA  
141501 TACACACACA CTCTTACACT CACACATACA CATGCACACA TACATACATA  
141551 TACTCATACA ATCATACTCT CACATACACT CACACATGCT CACACACTCA  
141601 TACACTGTCA CATATACATT CACACTCATA CACATACACA CACATACAGT  
141651 CACTCGTACT CACACACTCA TATTCTCACA CACTCTCA CACTTACACA  
141701 CACACACT CACTGTACA CACACACT CACTCTGA CCCTAGACTG

FIGURE 3, page 45 of 188

141751 CTCCTCATTC CTCAGGCCAG GCGTCCTTCC CTGTGAAGCC TTCCCCAGCG  
141801 TGCTGGGCTT AGGACTTATC TCAATTTTAC ACTGTCTTGC ATCCATTTGT  
141851 CTCTCTGTTG CCCTTGCCAG ATTGTGAGCA GCCTGAGAGA GGCAGGGCCT  
141901 TGCCCTGTTC ACTTTGTACT CCTGTCTATG GGCAGAGGGT CTATTTATTA  
141951 CTCAGAGGGA ATTCAATAAA TGTTGACCGG ATACATGGTA GATGGGTGGA  
142001 TGGATGAACT TTGAATGAAT GAGTAACCCT GAGGATTGGT AAATGTTCTT  
142051 TTTTTTTTTT TTTGAGACAG AGTCTCGCTC TTTGCGCCAG GCCGGACTGC  
142101 AGTGGCGCTA TCTCGGCTCA CTGCAAGCTC CGCCTCCTGG GTTCACGCCA  
142151 TTCTCCTGCC TCAGCCTCCC GAATAGCTGG GACTACAGGC GCCTGCCACC  
142201 GCACCCGGCT AATTTTTTGT ATTTTGTAGTA GAGACGGGGT TTCACCGTGT  
142251 TAGCCAGAAT GGTCTCGATC TCCTGACCCC ATGATCTGCC CGCCTCGGCC  
142301 TCCCAAAGTG CTGGGATTAC AGGCTTGAGC CACCGCACCT GGCCGGTAAG  
142351 TGTTCCTGTC CCAAGGAATT CTTCTACCTC AACTCCACTC AAAATGAGAA  
142401 CCCTGGGGAA GAGAGAGATT GATGGATTGG CTCATCAGGG ACTCTGTCCC  
142451 CACCCTGCCC CCTCCTTTCC CATATGGGGA GCAGGATGTG GTGAGAACT  
142501 TGCTCAAGAA GTGGGTAAAC ACTTTGATGG CAGAGGCCAT GTCCCGTTTC  
142551 CTTCCACTCA CAACCAAGTG AGGGGCACAA ATTATTCCCT CCCCTGCCC  
142601 CACTGCAGGA AAATGTACAA ATCCTAAGTT AATCTCTCCC ATAAGCACTG  
142651 GAAGCTTGTT GGCATAGGGA TTAGAGGTCT GGTCTCTACG ATAAGCTAGC  
142701 CACGATGTTG AGCCTTCAAC CATCGATAAA ATCACTTGGA AATCCAGTAT  
142751 CCCTGTTAGA GTTGGTTTCA GTGCCCATGT TGCATGCTGC TTTGTCAGGG  
142801 TCCTCATTAA GACTTTCTTC CTCCCACCTT AGACAGCACT GACCCTCTGT  
142851 TCAGGCTCAC ACAGTCGCTG TCACCCAGGC CCACCTGCAG CTGTGCTGCC  
142901 ACTCACCAA GTCTGAGAGG AACTGCTCCC TTACCAGGAC AGTGAGCACT  
142951 GGCCCAACCC CACTGTGCTC CTCCATGTGT GTGGGGAGTG GCCTCCCCAC  
143001 CCCCTGCCCC GAGCAAGAAC TGATTCTGGG TCACCCACCC AGGACTAGAA  
143051 CCCAGAGCTA GTCTGCCTCA CTCCTGAACA ACCACCGCTC CCACCATGGG  
143101 CTGGGCTCAG CACCCTGCTT GGGGCTTCGT GGAATATGTG GCATGGGACC  
143151 TGGCCTCAGG AAGCTTATTC TCTATTTGGG GGGAAAGTAA CAAGATAATA  
143201 CAAGACAGCA CAGAATCCTG TTCATATTTT TGTGGCACGG TCTTACGGAT  
143251 GAGAGGAGCT CAGAGGAGAC TAATATGGGT TAAATCAGGT AGGAAAGACT  
143301 TTGAGAGGCC ATAAGAACTT GAGCCTGACT TTGAAGGGTG GGTAAGAAAT  
143351 AGAATGGGTG CTCCCAATGG AGGGAACACC AGGCAAAGAA AGGAGTGAGC  
143401 ATGGCATGGG CAGAGGCCAG GGGAGACCAA TGTGGCAACG CCTTTCAGGG  
143451 ACTAGCAAAG ATAGCAGGCC GGAAGTCCCT ATGTGCAAAAT TACCATTTCAT  
143501 ATAAATGACT GATACCCCTT ACTGAGAACA AATGAGGAGA GAGAGAGAGT  
143551 AAATACAAAG TGACTGCATG CATGAATCAA TTAATAAACG AAGGTGTGCA  
143601 GCACCTGAAG GCAGGTGGA AAATAGGAAG GACCAGCAA GGTAGGTGGG  
143651 GGTGGGGGAA GCCAAGCACT GACTTCTTGG GGATGTATTA TAGATGTGGT  
143701 TGAGTAGAGA CTGCTCCTAT CAGGGAAGGT CACAGAAAGG TCCCCTTAA  
143751 ATTACTAGTT GAGTCCGCTA TATTTTGTAT GAAATACATA CATAAAAGT  
143801 ATGAAAACAG CCTTCTTTT TGCATAACCT TTGAGAATTT CCCCGATCAA  
143851 ATCCTGCAGC TGGGTGAGCA ACTCCCTGGC TCGACTCTGT GTGGCCTCCA  
143901 GGTCCAGGGA CCAAGTTTTC CCCAGGCTTC CTTGCAGCAG CTTTCTCCCT  
143951 CCTTCATGGC TGACCTGCAC CTCTCCCTC CATGGGGGGA AGGTAGGAGT  
144001 ATGAGCTCAG TGCTGGAAGC TGCTGTCTG GGAGAGTTGC TTGTGCCACA  
144051 GGAGTCAAAT GAACTTTTCC CCACGAGGCC GGCCCTCTG CTGATGCTGT  
144101 GTTTGTAAAA CCAGTAAAGG TTTTCTTTT GTGAAAGAGA GAGAGAGATA  
144151 TCCCTTGAAC AACTGGAACC TTTTAAACCT GGGCTATGGT TTTGTTTGGG  
144201 GTATTTGGTG GTGTGGGGT GGGACTGTCT TTCTCATTAT TAAACCAGAA  
144251 AAACCTGCAT ATGGACTCAG CAATGAAGAG TGATTTTGT CTTGGGAAAA  
144301 TGTAGCAGCC TTCAAGTTAG TAACTTGGGC TCTTCTGGGC ACCTCCACTG  
144351 CCGCACCTGG CCTGTGGAT TTGCGCTCAG ATAGAGCAAA GGCAGGGCTG  
144401 GGCTACAGAT GTCTGTGCA GACGGGGAGG GGCGGCCCA AACTGCTTA  
144451 GTGTAAGTGT CATCTCAGAA GCAGAGCTTC TAGGTGGAAC ATCCAAGGGC  
144501 ACCTTGAGAC GTGAGACGGT TGATCCATCA CAGTTGTGAT ATGTCAGTGA  
144551 GTACACACTC CAGGTTCAAG GACTGTCACC TTGGGAGGTG ATTGAGACTG  
144601 AATTCAAAAC AATGAATCGA TACTGACATG GAAGAATAGT TTGGCAAGAA  
144651 GGCTTGAAC TGCTCTGCAC CAAATTTGTA ATGCCAGTGA AGAAGCCAGT  
144701 CCTTGGCTTC CCCAGCCTCC ACCTAAGTTT GCTGGTCTCT CCTATTCTCC  
144751 AGCCTGCCTT CAGGTGCTCA GCACCTTCAT TTAGTAATTG ATTCATTTCAT  
144801 GCAGTCACTT GTATTCTTCT TCTCTCTCA TTTGCTCTCA GGAAAGGCTA  
144851 TCAGTCATCT ATGCCAGGAT ATATTAAAGT CAAACTCCTT GACACAGGAT

FIGURE 3, page 46 of 188

144901 ATTGTACTTT AATCTTCATA GCTGTATGAA AAACCCAGTC CTCTGATTAT  
144951 GTAAGAAATT TGTCCTAGGA GGTGAGAAG CCAGGAAAAG ATGAGGGAGG  
145001 AGAGTGTGCT TTAGGGAACA GACCATTTC CCTGCCTTGC TGTCTGGGTT  
145051 TGCACCCAG AGAAGAAACA CAAAGCACAG GTACAAGGGG AAAATGGATG  
145101 GCCAGTGGTG AAGAGAAATT GCTCTAACAC TTGGTTGAAC TCAAGTCCAA  
145151 ATACGACAGG GACAGGTAGG GATTTACAGC TGGTGGAGTA AGGGAAAGGA  
145201 TGGAAAATTA CCAAGAGGGC TTAGTTTGGT GTAGGGGGTG GGGAACTTGA  
145251 TTAGACTTCT AGGTGGAGGA AGAGACACTT GATTGGATAT CAAGAGTGGA  
145301 GGATCCTGGA TAAATTGGCT TCTCAGGATT CTTTGCTAAA ACTGGGCCCA  
145351 GTAGACCAAG GATTAGGCC TGCAAAGCAG AGGGCTCAAA AAAGCCTGAC  
145401 TAAATTTGT TCAAATCTCT GTCACCAGGT ACTCATAGGA CAGGGAGTGT  
145451 CTGTGAGGCC TGACACACAG TACTAAGGA TGCTGGCGTG GCCTTGGGCC  
145501 TGCCGTGATT GCTTGCTGGT GCTTCATGCA TAGTAAAGAT GGTCAAATCC  
145551 CTGAGACCTA GAAGAGACTT CCTGCCTCGC ACGGCATTCC TCAGCCAGGC  
145601 TTTTGAAGGA AGATGAAGCC AGACTCTGGT TGCTTGCGAA CTCAGGAGC  
145651 ACAAAGTCTC CCATCTCTGA GACCTTGGCC CAGGCGCAGC TCAGAACTG  
145701 AGTGTGGTGT CAGGTCACCT GCTCTCTAGG TTACAGAAAG CCCCAACTG  
145751 GCTCAAATAG TAGGGAAAAT TATTTTACA CATTGCCAAG TCCATGAATA  
145801 GGGCAGGCC CAGGCTCAGA ACCATCATCA GTATCAAGCG CCGGCTTCCT  
145851 TCCACTCTAT CATCCTTCGT GGGCCAGCTT AGCCTTCCAG CTGGACCCTG  
145901 CAGAGTCACT CACAGACCCA CATCCAAGGA AAAAGACTAT CTCTTCAGAA  
145951 TCCTTCTTAG CACTCCTCAC ATTTCACTGG CCAGGGTAGT CTACCGGCTC  
146001 CTTCCCGAAC CAATCGTTGT CATGGAAGTG GGATTTCAGG AGTGTCTTTG  
146051 ATTAATCGTT AGGAGTGAAG TGGAGGCTCC AGAGTCAACC CCTGCATCCT  
146101 CCACATGTGC TACTTTGAGT CCACTTGAGT TGAATTGAAT TCTGGGCCAC  
146151 AGAGTTGAGT GTTAATGGGC TGAAAGATAA TTAAGGTGTT TTCTACATCT  
146201 TGGAGTGAGA ACAAGAGCAC GCATGTGCCC TGGCACCAA GGGACACAGA  
146251 GCTTGGCATA TTTCTTAGGA ATTCTCCAGG GTGTGGGGAG AGGGAGGACC  
146301 AAGCTCCAG GCCCTGCCCC TCAAGGGCTA TGAGTGCCAA GCCTGTGTGT  
146351 GAGCACCTGG CCAGCTTTCT GTTTGAGAAG ACATCATCTG GGGGGCCAGA  
146401 GGGGACATCG GGGCATGTCA CAGAAGCAGT TGTCGTGGCT CTCTTGCCCTC  
146451 AGTGAGGACG TGGTCTTGAG ATCTGTGTCT ACCTTTCTCT CCCCATGCC  
146501 CCTTCTTTGG ACAGTGTCTG TGATGGACTC AGGTGAGGTC AGATGGTTTT  
146551 TGAAAGCAGA TGGCCCCCAC TTGCTGCCTG AGACCATTGT TTA CTCTCA  
146601 TATCATGGCT GGCAGCAGG CCTGTGCTTG GCAGGACTCT TCCTCTAAAC  
146651 CTGCATAGGC CTAGAGCTTG TCTCATCCTT GCTGAGAGCC AGGAGGTTCT  
146701 GAGGTGTGGT TGTGAGAAATG TGTAAGTTATT TTCTTATTTA AACATCCTAG  
146751 GTCTCGGTCT TTTCTTTTAA AATGTGTTGG GGGAGTAAAG TTCTCAAATG  
146801 AAGATAACTT ATGAGACTTA TTACGCAGGC TGATCAAATG GCATGATAAA  
146851 TCATATAAAT GGTATAAAT GCTTTGATAT GAATAGCAGA ATAGTGAATA  
146901 AGGATGAAGC ATCCAACCCT TCTCCAAGGT CACTGGAGTG AAAAATATCT  
146951 TATTGGGCGC CCGAGATATG TCCAGTCAGT CAGCAACAGA GCCTAGCTTG  
147001 TAACTCCGT AGAATTCTT TGCTAATTCT GAGGGTTTGT TTGTTTGT  
147051 GTTTGTTGT TTAGGGAGTA AAAATCAAAT TTGCATTCT CCCAGGATGT  
147101 TTCAAGGACA GATTTACAGC AACAAACATT GGTGAACATA AACTGGGAGA  
147151 TTGCACTGTA GAGTTAGGAT ATGGAACAGA AAAATGTTTA AAGCTCCAGT  
147201 AAATACCTA GAAATGTAAT TAAGTCCCTT GCAAGAGGCC AAAATGCCAA  
147251 AAATGTGACA GTCACCCTGT TCTTGAAGAA CCACTTCTG AGGTAATCAG  
147301 TCTGTTATGA CAGGGGAGGA TGGATGGAGG CCCCATAATT GTGTCTGGA  
147351 TTGAAACCCA TGCTAGTTAG GGTATTGTCC CTTTAGATTG GCAATTTTAA  
147401 TATCAGAGCC ACATTGACAG ATGGAATTTG AGTAAGTGAT TTGTGCAAGC  
147451 AGTCCACAAC TCACAAGAGA GTTTTGCTCC CAGCAGTTTA GCATTAGGCA  
147501 GTCATCTAGA CCTTTGAAAA CAAAAATGCA TTTTTTTCCA CAGGAGTATT  
147551 CTCTGAATG TGGTTTGAAT TCTGCACTAG TGTCAAAAAC TTTATTTAAC  
147601 CTTCAATGTT GCTAAAAACT ACTTTATACA TACAATTAAT ATCATGGAAT  
147651 CCAATGTTAT AAGAAAAAT GTAGCACTGA AAGGGAAAT GTTCCTTTAT  
147701 TTTCTCTTGC TTGGCGTAAC CTGAAGGAAA CAGATTTAAC TGAAAGAGGA  
147751 TGAGAAGTTA GCCTCAGAGC ATGCAAGAGT TGAAGGCGT TTGAGCCAGA  
147801 GCTCAATTCA AGCCCTTGTT TATCAAACGA GGAACTGAG ACTCAGAGAA  
147851 ATTTGGTGT TGGCCCAAAG TCACACAGCC AGCAGTGTGA CTAGCATTCA  
147901 GGCTGCCCT GACCCAGTGA ATACTCCCTG TAGAAAGTTT CCAAAGAGAC  
147951 AATCAGATCC CCTAGGTAGC GTTGGGCCCC ACTGGAAAGT CGACTTTTTT  
148001 TCAGTTTCAC TATAAACAT GCCCTGTTAC TTCTTAAAC GGAGATGAGG

148051 CTTGCGACTA TTAGGCTTCT CTAGGAATAG AGCCCTGGAG CTCATAGACA  
148101 GAAAGAAAAG AAATGTGTGT TCATGCGAGA AGCAATGATA AGGTGAAACT  
148151 AACTGAGCTG GAAACTGCAA AAGACCAGGA GCAGAAAATG TGTGGTCCCT  
148201 GCAAGGAGGA GCGGGGACCC CAAAATCAGA TGGCGGACAG ACAGCTGCAC  
148251 ACTAGGTGGC GCTGTCATCC CCCC GTGGC TTGGTTGCTG CCCTTGGA  
148301 GAGCACTGGG GAAGGTGTTA CCGGTGGAGG GTGTCCAGGT TCTCGGTGTC  
148351 TTGAACAAAG AATTGGACAA AACGCACAAA GCAAGAATGA AGTAACATAA  
148401 GCAGAGATGT ACTGAAAATG AAAGTACACT CCACAGTGTG GGAGCGGGCC  
148451 TGAGCATAGG ACCCGAAGGG CCCC GTTACA GAATTTATGG GGGCTTAAAT  
148501 ACCCTCTAGA GGATTCCATT GGTACTTGG TTTACACCCT ATTTAAATGA  
148551 AGAGGATGAA GTAAAGTTAC AAAGTCATTT ACTCGGCGTA CACCTATGG  
148601 GGAGGATATT TCCTTTCGTA GCTGAAGTGT GAATCAGCCT CATGTGTTTC  
148651 CTGCCTCCAG ATCCTATTTT CCTACCTCAA AGGAGGACCC TGTGTCCATG  
148701 ACAGGGGCAG GGGGAGAGTG TGGCATGATT CTTGCGCTAG GGAAGGGGA  
148751 GGGTGGTGAG ACACACAGCT CACTAGTCCA GTGTGGATAA GCCAGAGTTC  
148801 ATCAAAGATA ACCCAAACT CAGCGCCACA GCATTTCACT TCCCAAAGCC  
148851 TGAGTTGACG CTTATGGTCT CCTGTTCTCC CATGAGAGAG GTAGCCTTGG  
148901 CCCCCACAGC CTCTTTCCTC TCCTGTGTGA CCCCATTGCC TCAGACTACA  
148951 AACTGCTGGA GGACAAGGAC TGTCTGTTTG GTTTTGCTTT GTTGTTAATT  
149001 CTCCACAGTC TCCTCTGCAG ATGTTTGATA ATATCTGCTA ATTGAATTTT  
149051 TAATTTACTC AACTCTAAGG TAGATTTTTG AGAGCAAAAC AATTTTTTAA  
149101 AAAACATTAT TTTATATTGA CACTTGAAGT TCTAAATAAG TGGGTTTTTT  
149151 TTAACCTGGA ATTAATAAAA TCTAATCCTC GTCATATTTA ATTGTCCTAA  
149201 ATACTGAGTG ACTCTTGGTA TGCTATTAAT TCCACATGCA GACTCTTCAT  
149251 GGGTGGTGGC TGATGGGGGC TTCCCTCTCC ACTGCTTTGG AGGAAGGGCT  
149301 GCCCTGCACG GACCCAGGG TGGTGGAAAG GGAAGCACT CTCGGGGACT  
149351 GTCGGTGGGT TTGCTTTGCT CTTTGTTTTT AGCCTCAGAA TAAACATATG  
149401 TGCCCTTTGC TTCAGCCTCT CAGGCCAAG GAAATGGGGA AAAACAGTGG  
149451 AATCTCTGCA GTTCTGGAA GACTGCTGGC TGAAAGCTTC CCGAGAGCCT  
149501 TCAGCCCCAC ACATGCCCTC CTGCTTCCAG AGGCAGGTGG GGTCTGTTGG  
149551 AGGTGGGGGC AGTGACACCA TACCTCTAAG GCAGAGGTCT GAGCCATCCA  
149601 TCAGCACCAG CCTGACTTTC AGAGGCCATG GGAGCTGGGG TGTCTAATGT  
149651 CCGCTGCGCC TCTCCTCCGT CCCC GTCTAC AACAGGTGTG TGTGCACCCT  
149701 ACCCCCTGCT GCTCCAGAGC TCCTGGAGGA TGTGATGGGG CCTTCACAGG  
149751 AGGCTGTCCA AGCCAACGCT TGAAACAATC TAAAAGGTTG CAGGTTTTAC  
149801 AGCACTCAAT CCTTCCCTCC TCCTCTCCA CTTGTGTTT GGTGATAATA  
149851 CTCCCACAGA CAACAGTGAT GCCAGTGCTT GTGTCTGTGA GGCCCTGGTA  
149901 ACTGGAAAAC AGTTGCCCAT CATCTGGGGG CATTCCCATG AGGCCAGGCC  
149951 ATCCCCAGTC CACAGATGGG ACCCAGGCC AGAGAGGACA TGTGGCTTGC  
150001 CAGATGCAGA AGGACGGGGA TTCCAACCCC AGGGCACCTC TCTGGCATTC  
150051 CCATTAAAGGA AGCCTATTCT CTCCTCATGA AATACATGGG ATGAGATGCT  
150101 GCCTTGCCCA ATGCCAGACC TAACTTCAAT TTGGGATGAA GACAGAGAAC  
150151 GGGGAGGAAG GAGGCTCACT ACCCAAGGAG GTGAGCTGAT GGCATCCCTG  
150201 TTTCTTCTG GGCATACACA GCTGGGATTG TAAAACCCAA GGCAGATATT  
150251 TCAAGGCTGC CATTACCATT TTCTGAAGGA CAAAATCATT CTTTTTTATT  
150301 AATACATAAA TAACTTTTTT CTTGAGCAGG CCCAAAGAAA TGAAACACAG  
150351 ATGGTGATAA TGTTGAAAAT GTTTACCTAT TTCCTCTCTG AGGACATCAG  
150401 ATTAGCCTTT TCTGTGGGCG GAATGTGTAA TCTGCTGGA GACAATATCA  
150451 TCCTTTTGAT CTTAAATATC ATTTTTCATA TCTTTGCCG AAAAGCTGAT  
150501 TATTATCATG ACATTTTTTA ACAATGACTG TTCCTGCGC AGAATGGGAA  
150551 AGGAAAGTTC AGCTGAACGT ATAGATAGAT AGATGCTTGT CGGAGGCCAG  
150601 GCTATGGGAA TGAATTTTCC TGTGTTTCTT CTGCCTGGTG ACATTTGACA  
150651 TTAACCCCTT CCTCCCGGAC TCGGTCTTGT GCACTAATTG GAATCTGATG  
150701 CTCAGCTGTA GGAATTGGCT GCTCCTCATT TACATGCAGA GACCATTGAT  
150751 TAATGGCCTC ATCCACTCCT TCCAAGGTCA CTGTGTTCCC TTTTCTTCTG  
150801 GAAGTTAAAG AATGCTTGAT TAAATGGCAG AAGCAGATTG AATGGGAAA  
150851 TGTATGGGGA AGGGCTTTGT TACACCAAGT GGGGCAATGC AGACTTGAGA  
150901 TGCTGACGAC TCCTTTGTAG GTGGAGCCCA TCAGTGCAAA TGACACAGGC  
150951 AGCTGAGAAG CTTTGATTG GCCCCGCTGC CTGGCTGGC TAACATGAAA  
151001 CTGACAATTC TAAGAGGCTC CTCTTCACAG CTCACTCGCA TCCCTTCAGG  
151051 GCTTCACAGC ATTTCAAAG AAAGGCATTG GATAAAGGAG AAAGCAGCAG  
151101 AAGTGGAAG GACACAGATT TCAAAACATT TGTTCACAT TGGCTACAGA  
151151 GTTTTGTTT TGCGGGGAAA GGGGTGAGTC TATGCATACC AGGTACCACC

FIGURE 3, page 48 of 188



151201 CACCTGTGTG CTCCAGAAGG CCCGTGATGT CCTGCCCAGT TGCTGAAATC  
 151251 TATAAAATGT CAGGCCAGGT AGCAGCAGGG TGAAAGGCTG GAAGCAGCCA  
 151301 GCAAAGGAAA GGTTAACGTG CGCATGCTGT TTGCAGTTCC ATGGCATGTG  
 151351 GCATCTTGCA CAACCAGGCC ATTTTGCAAC CGAGTTAAAA TTCCCCTGCA  
 151401 GCCACAGGGA GGGAAATAGAT AAATCATGAA TGAATTGAAA TTATATTTC  
 151451 TTCTCTTAGC TTTCTTTTTT TCTTCTTCTT TTTTCTTTTC TTTCTCTATC  
 151501 TCCCCACTCC AGGAAAAATG TTACAGAAAA TTATAGGTTG TAAATTCCAC  
 151551 CCAGTGCATT TAGCTCCATC CTTGCTGAGG GTCAGAGGAA TGGAACTCA  
 151601 CCAGTCATAT TTCATGAGGT CTTTCAGCAA GTTCCTGTAC TGTGTAGAGA  
 151651 TCTGAAGGGC AAAAATTCAA AAAGTCAGCA GGGCACAAAT GGACCAGAGG  
 151701 TAGGAAGCAG ACAGGTTTCC TGGGGCATCC TCTGGGTGCA GCCAGGCTGT  
 151751 GTGTGCTCCC AGCTCTTCTC AACTCAGAAC CATTATGTC ACAGATAGTT  
 151801 GGGGGCTCGT TCCTATGCTG GGGCAAAACC ATAGTGAAGA AAATTGCATG  
 151851 CTTATGTGGT GTGTTACTTG TGCTTCAGGG TTTTTTGTGT TGTTTTGTGT  
 151901 TGTTTTGTGT TGTTTTTTTA AGTACAACCT TGTATGATGT GCCTTGACCA  
 151951 TTGACAAGTC TTCAGAAAAA AAGGAAAGAA AGAAAGCTTC ATACTATTGG  
 152001 GTCCTAACCC AAAGTGCCAG TGACCACCAA GGGCTGTTGG CCTCAGCAGG  
 152051 GAAAGCCTGT GTCTGGGTCT TGAAGGCAGT GTAGGCAGCA GGCAGAGAAT  
 152101 CAGCTGGTTT TCCCCCTCCC TAAGCTGGAC TAATGCGTAA GCTACACTGA  
 152151 AGAAAGGGGA GGGTGACCAT CCCCCAAAAG CAGGGCTCAC TAGCCAAGTG  
 152201 TGTAACCCAG AGCACATCAA AGCTAAAGCA AAAAGTAGAA GCCAAAGCTA  
 152251 TCACAAGGCC TAAGTTGGCG TCCAGTCCGA GCATGGCCCA CTTGTTGTCT  
 152301 CAGGACGGCC AGCTTCACAG CCAGTGGGCT TCATCTCCAC CCACCAGGAG  
 152351 GTTTGGGCTA GGGTGTGTGT ATGTGCATGT GTGAGTCAGT GAATGATGTG  
 152401 CTGCAGAAAT CAGAAATACA GAAGGACCCT GAGGAGCTCC TCCAAGAGTC  
 152451 CCTGGGGTCC TAATATAACC AGGACATTAT GCCCAAAAGA CTGATCCACA  
 152501 TGGCTGAGGC TCTTTACAGG AAATACCTGC ATTGCTAAGT TACTATCCCC  
 152551 AGAACGCCCT CCCCCTGCCT ACACGTAGCA AGTAGAACTT GCTGATGACA  
 152601 AGACACTACG AGAGCTGGGA ACCTAGAAGT ATTCGGCGAC TGTCAGACCT  
 152651 CCAGGAGCCT CCCTGTGGGT TCAGAGGGAG CATGCACATG AACTTCTGGG  
 152701 TGCTAGCCCA GGCTGGAGGC ATTCCCTTCC TGGCAAGGGA GCAGGAGGCC  
 152751 AGCACAGGTT TGCAGAAGTC CATGTCCTCA GGCTGTGGTG GAGTGTGGGC  
 152801 ACCAGGCCAG GAGTCTTGTT CATAATTCCA TGTCACCAAC CCTTTGCCTT  
 152851 TTGACCATT CACTTCTCTC TAAGACCTTA AGTATCATTT TGCTCTTGAA  
 152901 GCCTCCTTGA ATATGCTCTT GAGCTGACAT AAAACTTCCC TTGGGATTTT  
 152951 CCTTCTTTTC TCTCCATCTA GACATTCTC TTTTGCAGGC CTCTTCAAA  
 153001 GACCCTCTCT TGTCAGCTTC AGCTGGCTAA GTCTGCATGC CTGGGCCTTT  
 153051 CTAGCAGGTA TTTGAAAACG CAATCAATGT ATGTTAAGAA ATGTAATCAA  
 153101 TGAGGTACAC ATATATATAT ATATGCTTAA AAAACAAATT TATTTTATCT  
 153151 TTTGCTGTGT TATCGGTAGC AGTTGCAATG TTTTACCTTC ACCCAGAAGT  
 153201 TACTATGCCA GAAATGCTCT CATTCACTCT TTTGGGTTCA GCGTTTCCTT  
 153251 GCCTATTATT TTCTTGGGAA ATAAAAATAC CTCTCAAGAT AATTGCCAG  
 153301 CATTTTTCATA GGATGAGTTT GTCCTTTTTT TAAAGCAGGA AGGCTAGGAA  
 153351 GTACCAAGAA GAGGAGCCTG GGTAGATGAA GGAATAAAGA GGAGGAAATC  
 153401 TAAACATGGG GAGATTACTG AATGTGCCAT GTGCACCTCT CCCTCTCCAC  
 153451 TCTTCTCAA CTCAACCACA AACCTCCCAA GGCAGGGGCC ACGTCTCCCT  
 153501 CATCTCTCTA CCCTCCTCCT TTAGTATGGA GCCTGACACT CATGCCTTCA  
 153551 TTTAACCAAC CCATGTTGAG TGAGGGCTAC TCTGCACCAA GTACTGGGCT  
 153601 GGGAGTGGGG CACCGAGTCA ACAAGACAAG GCCCTGCCCT CAAGGCGATC  
 153651 TCAGTTTGTG AAGGAGATTG TCAACAGAGA AAAGTCTAAA ATGAAATGCC  
 153701 ATGAGGAGAC CCCTGTGATA GGAGAGAATG CTTTAGGAGC CCACACATCT  
 153751 TGGGGTCTCA GAAATTGCAG GCCTGGTCTG GTTGCTGAGG GACCACCCCC  
 153801 CACAGAAAAG AAAAAGAGCC TTCAAGCCCC AGAGGGTGAC TGGCAAACTT  
 153851 TGTTGGTAT TCAGAACAGA CAAATCTAG GTCAACAGAA TGTGGGTGGT  
 153901 GGCTTATCAC AGAGCGGGGC AGCCATCGTG ACTCGCGCTC GGCTGCCTCA  
 153951 TGAATTCCTC TCAAATGTTT CCAGCTAACG TGTGATTCCA TGGTGAGAGA  
 154001 AATGCCGCCT TTGAGGGCAG AGATATTTT CTTTCTTGAC AAATAGTTTC  
 154051 TATGTCCAGG CAGCCATCTG CCACCTCTGT GAGCTTATGA GATCCAGCGA  
 154101 CTGCTGCTGA AGGTTTCAAT TCAGGATTGA TGCCGAAGTT GTGTGTGGAG  
 154151 GAAGGGGTAT CGCTGGTGCA AACCACCAT TCAGAAAAAA TTAATATCCA  
 154201 GCACCTTCC AGCTGAAGCT TGTCCAGGAT TTCCTTGCCA AGTTTCATT  
 154251 TTAAGGCTC TGCAACTTTA CTCAGATGTA GGTATTTTGT CTTGTACTC  
 154301 AGATTTTCAC CAAACTGATA TATCATTAAC CCTTTGTTTT TACAATACAT

FIGURE 3, page 49 of 188

154351 GCTTTATTGC AAAACCAATT TCAACAAAGT ATTGCAGATG CAATGTAATT  
 154401 TTTATGTCTT AGTTGTTGTT GTTTTTTTTT CTTTTTGGT TGCTAGGGTA  
 154451 CCAAATGCTT TTGAGAAAGT AGCGTGATAG TATCTATAAT ATGGTGGTTT  
 154501 TCTGGATAAG AGATTGCATT ATCCTCATGT AATATATTG GGCAGACTGT  
 154551 GTCCATCATG GCTCAGCTAG ATAAATAAAT TAAAACTCGC TGATTGAGGA  
 154601 GGAAATGTGA TATTTATATT GCTGAGAATG GTTTGTGCTT CTCTTCTGAC  
 154651 AGCTGCTGTG TTGCTGGGAT GCCTCATCCC AACCCAACTT AGTTGTTTCC  
 154701 ACTTCTTAGG AAATATAAAA ATGCTGTAAT GTTTTCAGGA CTGTGAAAAC  
 154751 ACTGCCTTAG AGGCTGGGCA GCCACTGTTT CTCCAAAGCC TCCATCCCCT  
 154801 CAACCTGGCC CCCTCTTCCT GATTAGTCAT GAGATGACCT AAGAGTCCTT  
 154851 ATTGGACACC AACTCCGTGC TGGACATGGT GGCCCTTCAT GGGGATCAGT  
 154901 GCCCTTGCTT GGGGCGTGCT GTGGCTCCCA GCCACAGACC CACTAGGAGG  
 154951 TTTCTAAGAA GGTGGCTTGT TCCTTCTCTT CCATTTCCTT CTCCAAGTTG  
 155001 ACAGCCTTGG GTGGGCAAGA GTCAGGGCTG GCCCAAGGT CTAAGCTCAG  
 155051 GCAGATATTG GTCCCAAGT CCTTGGCCTG GGTCCAGGAG GGACTTGCCT  
 155101 TGAGATAGCC CAAGATAAGA CAGCATAGGT CCCTATGTGA GGCCCTCTG  
 155151 CCCAGGTGTA GTGAAGTGCT ACTCCAGGG ACAGGTTCCA TTGCTGGGG  
 155201 GTGGGAGCAT CCACTCAGAA GTTCATCTAG TCTGAATACA AGATCTTGGA  
 155251 AAAGCTATTA TGCACTCTGT GTACACTCAG ATGTCATATG AAGACCGTGG  
 155301 GAATTATGAT GATGATGATG ATGATGGTGA TGATGAAGAA CTACAGACTT  
 155351 CAAGAGAAGG TGGCATGAAT GGGGCCCTTC AGGAAGGAGA AAAAATTCCA  
 155401 TGTTCGTGTTA CTGCTTCTC ACTGTCTGTG TTGTCTGTTG ATGTAGAAGA  
 155451 AGAGTGACAT AGAAGATACA GTATGGCACA CTGAGGGGTG GCCTGGGCTT  
 155501 GGATCTGGAG TCACTCATCT GTTCATTCAT TCATTTCATC ATTCATTTTT  
 155551 GAGCCTGTAT GTGCACAGGC ATTGTTCTAG GCACTGATAT TGAATTCAAG  
 155601 TTCATAATGC ACCATTTGTA TAACCTCCAA CAAGTGACTT CACTGCTGTG  
 155651 CCTCAGTTGC TTCATAGAGT TGTTGGTAGG ACTCTGACTA AATGGGACAC  
 155701 TGCACAGAGT GCGCCTGCAA TAAAGAATG TCATCATCCT GTCTTTTAGA  
 155751 TGTAAGTCTGA GAACAGCAGA GCTGTGCCAT GTGTGTTCTC TCTGGCAGGA  
 155801 ATAGCAACAG GACACTCCAC TCAGCTGCCT GGGGTCCCTG GAAGAGCATC  
 155851 CACTGGGGCT GCCCAAGCAC AGCTCCTGCT TTCCTGGATT CAAATCCTGG  
 155901 CTCTACTACT TACAACCTGA GCGATCTTGG ACTGATTGCT TAACCTCTTT  
 155951 GAGCCTCAAT TTCTTCATCT ACACAGTACA TTTAATACGA GCACCTACCT  
 156001 CATAAGGAAG TTGTGAGGAT TAAATGAGT AATACATGTG CACCTCTCAG  
 156051 AGCCTAGCAT TAGTAAAGC ACTAGATGTT AGCTGTTGTT GGTGGTGGTG  
 156101 TTTCTGGAGG AATTTCCATT TAAATGAGAA GTGCCTGTGG AAATTGCCTG  
 156151 CACAGAAATC TCTTAGCTCA GGAAAATTC TCTGGCTGCA GATCCCTCTA  
 156201 AGAATTCCTG CATTGTTTTT CTCTCATTGC TCAGTGAAAC ACAAATACCT  
 156251 TTGTCGCCTT TAAAAAATTC AGTTGTTTGG TTTGGTACTT GAGAGATATG  
 156301 AGCAAAGGAT GATACAACAA GAATAGTCTA TATCTTCTTA GACATGCTTC  
 156351 TCCCCAGGTA ATCAGAAAGG CAAGAGTGAC ACTCTGCCAT GCAGCTAGAG  
 156401 TTTTATATT TCCAATGGGA GTGAGGCCAG GCAGCCAGCT TCTCCTCTC  
 156451 CTGGCAAGGC TCTTCTGCCA AGTTGGGAGG GCTCCATCCT CTGTGCCCA  
 156501 ACAGCCTGCT GTGTGGAAC CCACGGCAGC CCCAGATACT CTGTAGGTCT  
 156551 ATCTCCCCAG CCAGGTGTGG GCTCCTGGG GAAGAGGGAC CATACTTTTT  
 156601 GTATCTGCAT CTACAGTGCC TGACAGGGAA GCATTAGGAG GCAGGCAGAC  
 156651 AGCAGGACAA ATGGCTCCTT CTCTCTTTGG CTGTGGCCAC CTTGGTGCCT  
 156701 ATAGCTCATG GCAATCTCG ATGCTCTCTT CCCTTGGTGG AGAGGTACAG  
 156751 CAAATCCGTT GCCAGACAAA CAGAAATATT CAATTCTTCC GCCCAACTTG  
 156801 AACAATTCTG TTTCTTCTC AAATGCCTCA GGAGCCTTGG AGAAGTTCCT  
 156851 GTCCCTCCCC CCAGGCCTCA GTTCTCATC TCTGAGATGA GGCTGCTCTG  
 156901 TACCCAGCAA AGTGTCCAC GGACCCTGGC TTAGCCCAAG TACAGACAGA  
 156951 GGTGGTGGCT CTGCTCCACA CATGTGTTT TGCTGTGTTT TGGTCTGTT  
 157001 GGCCTTTTCT TGATGTTAAC ATTCTCTTTT TTTCTTTTT TGAGACAGAC  
 157051 TTTTGCTCTT GTTGCCAGG CTAGAGTGAA GTGGCATGAT CTCAGCTCAC  
 157101 TGCAACCTCC CCCTCCTGGG TTCAAGCGAT TCTTCTGCCT CAGCCTGCCA  
 157151 AGTAGCTGGC ATTACAGGTG CCTGCCACCA TGCCAGCTA ATTTTTTTTT  
 157201 TTTTAGTAGA GACAGAGTTT TGCCATGTTG GCCAGGCTGA TCTTGAATC  
 157251 CTGACCTCAG GTAATCCGCA CGCCTCTGCC TCCCAAAGTG CTGGGATTAC  
 157301 AGGCATGAGC CACCGTGCCT GGCCAACATT CTCAAACCTT CCTTTCGTAA  
 157351 ACAGCAGGCC CTCAGAGGC TTCCTGATTG GAAGGGAAAC AGTGACCCTC  
 157401 AGCCAATGCA GGTGGAACAA ATCAATGTGT GCAGACCCTG CCTGCCTAAA  
 157451 TCAATTCAAC CTGCCCTCTA GGGACTTTGC CATAACTGGG AAAGAGCTTC

FIGURE 3, page 50 of 188

157501 CTTCTCCGAG TTACTTAGGC CCAGATCTAA CTCCCATCCT TTTGGTTTCC  
 157551 TCTCCCTCCA TTCTTCTTCC TCTCCAGTT CCCCTTCTTT CCTCCCTCCC  
 157601 ATCATGCCTC TCCCTCCTCT GTCCTGTCT CCTCCACTC ACCCCATTCC  
 157651 CCCTCCAGGG TGAAGAGTCT GGCTACCTGG GAACACCTGG GGTCTGGGTC  
 157701 TTGTCCAGCA TGTACTAAGG GCTGGCATCA CCTGGCTCTC CCCCATTGGT  
 157751 CTGCAGCCCT GATCTCCCTT CCTCTGTGAA TGCTCCAGCT CCCTGATGGA  
 157801 TCTGATCTGA AAAGGTGCCG GTAGACTCTG CATTAAGTCA GCTGCTTGTG  
 157851 GCACCAAGAT GACAGGTGTG ATGTTTTCTT GGGGATGCCG AACTGGGAAA  
 157901 AGTACCATCT CCTGTTGTAA TGGAGTTAAT GCGTTCCTGC TCAGGACAGC  
 157951 TGCACTTACA TCTGGTGTTA AACCACTGTT ATTTAAACTT TATGATGTGA  
 158001 GAGGATGCCA GCTCGTCCAC TTGCAACATA TAAATTATGT CGATTGCTCA  
 158051 TGCACTTTTT TTAACCTGTA TTCTTCTGAA TTATGAAAGA TGGACAAGAC  
 158101 CAGTGGTGGT TCTCAGAGCT CCCCTGGGCC CTGTGGGCCG TGAGTGCTCG  
 158151 GTGTGTGTGC AGATGGCTAA AAGGAAGCAG CAGGGCCGGA GCCCATAGCC  
 158201 TCCCCAGGCC ATTAGGGCAC AGTCTGGCT GAGCCTCCCA GCTCCTGAGG  
 158251 GGCCCATCAC TCTGGGCTCA GTAGTTTAC CCTCAGGTGA CCTCCTCTGC  
 158301 CTTCTTCTCT TGGGGAGATC CATAATGCAT GTCATAAAGA GAATGGACCC  
 158351 TACAGCTGGT CTGCCTGTAA AAGTCTCCCC TGATAGAAAT CATCTTGCTT  
 158401 GCTGTGGGTT TGCATCATGG GCTGTTTTTT CCTTGGGCAT GGAGATGGAG  
 158451 GAAAGACTAG TATTTGTGTT TGGTGAGGAA CCTAAGTAAA GCTCTTAGCA  
 158501 AAAAGAATTG TTCAAAGCC AGCTGGTAAG TGGCTATTCC AAAGCCACTT  
 158551 GTACAGGGG GTCCAACACA AAAGCCCTT CACATTTCTG AAGCAAACCT  
 158601 GACCTAAACC CAGAAAGAGA AGCCTGGATT GTAACCTCTG CTAGACAACCT  
 158651 GACCACAGTG TGTCCCCAGT AAAGGCCCTAG TGGGACCCCA AGAGCAGAGG  
 158701 TCCTGGGGAT CAATTCTGTA GATTCCCTTT GCTCAGGATG AAATCCAATT  
 158751 TGCCCTCCAT TTCATTTTTT TAAAAAATTT CCTGCATTG CCAATACTTA  
 158801 AAAGACCCGC AGGGAAAATG AATTGCACAG TGGTGTGGA AGGGAGAGGA  
 158851 AAAGAGCGCA CCCAACAGGG AACACCCGCC ATCTCAGACA GAAGTCTGGG  
 158901 AACTGCTGTG ATGGACCTTG AAACACGGGA GGGACGCAGA CCTACCCCT  
 158951 CACCTCGGAC CCCGCCTGGG GTGGTTGCTT GAGGAAGGCT CTCCCTGTAA  
 159001 TCCGCCCTTT CAGTCACTGT CTGTTTTCCA GGTTTTCCCC ACATGGAGAT  
 159051 CACTCCTGGT TGCTTTATG GGTCCCAAAC CACGGGCTTG TCTCCAGGCC  
 159101 CCAACCCAG CCACAGCTCC TGCCCTTCAG AGGCCCGCGC GTGTTAGACT  
 159151 ATTTGGCCAT GGTTTACCTT GGCCTTGCTA GCTTTCAGCT GACAGTGCTA  
 159201 TGCCAGCCTC CCTCTCACA CCCCAAAGGG TTCTGTGTGG TGCCGTATGC  
 159251 CACGGAATC CACATGATGG GGTTGAGATG TCCCCCAAAC AAGGCACCAG  
 159301 GCCCAGCGTT CTGAAGAGGG GTGTCGGGGT CATCTCAGTG CCAGGAATCC  
 159351 ACCTGGCAAG CAGGTTCAAG GTGAGGCGCG AAGGGGCACT GCAGGGCGAG  
 159401 GCCACCTTAC CCCCCAGGCC TATGGTGTGC ACAGACGCAG GGGCACAGGG  
 159451 GCACGTGGGG CGGATCGTTC TGTAAGACAC TCAGCGCTTG TTTGGGGTCA  
 159501 TCTTCAGGGG ATCAGAGGAG TGGGGCTGTT TGCAGAGATG CTCCCTTCCC  
 159551 TTTCAACCCC TGCTATATA ATATATATA ATATGCGCTT GAAGGCTACC  
 159601 ACTAAAATGG AAATGTTATC TGGGAGTTGT CAGAATTACC TCCCCAGTAT  
 159651 AAATTAGTCA ATCGCCATTA AACATCTGGG TGAGAATTAG TCAGCTGATT  
 159701 ACCTAAACAT TGGTGGCAGC TGTGGCTTCA AAAGAGAACT AGATTTGGGG  
 159751 ACCTGAATTT AAAACCCCAT CTTATCACCT TTGGGTGTCA AACTTCATTG  
 159801 TGTTTAAGAA GCATCTGGGG AGTTTGCACA AAAGGCGGAA AATTCTGAGC  
 159851 GCCCCCCCCC CCGCCCCCG CACCCCTGGG GATTCTGAAG CCGCACTGTC  
 159901 TGACCTTGGG AGCTGTGAG GACCTCTCAA CCTCAGTCTT CTGTCTCGAG  
 159951 AGTGGGGACG TTAGTGTGTT CCCAATGGTG TCATGGTGAG GACAGTGACA  
 160001 GTGAGCTGAG CTCTGACAGA GGCAAGTGCC CACTGCTGCC GTTCACTTTG  
 160051 TTGTACCCTC CTTTAACTT CTGTGTGCC TCTACTGTGA GCCCCGGGAG  
 160101 CAGGGAACAC CTGACATCAT GTGCTCTGAG GGAACGCATT GAAAAGCCAA  
 160151 GGGTGGCACC TGAAGGGAT GGGTTACAAA GAGCCATCCA CACACCTGCA  
 160201 CTCTGGGCTG TGCCACTGGC AGCATACGGG GGGCCCCCTG TTTCTCTCCT  
 160251 TCAGACGGTG TGGGTGCTGG GCCTGGTGAT CTCCTGAGCC ACTGAGGACG  
 160301 GTCCCTGGGC CTGTGGAAAA TAGAGGTGCA GGGAGAAGTC TAGAAGCCAT  
 160351 GACTGTGACT ACAGAGTGAA CAGAAACCAT TCGGCAGGGC AGCCCTGGGG  
 160401 AGGGAAGCAG CATATGGTTT CAGCAGGGGC AAATTAACGG AATGTTATCT  
 160451 TCCTCCTACT TTATGATCAC TGTTTACTGA TAGTGCTTAA TTTAAAGTGT  
 160501 GTTCTCAGCA TCTCAAGTGT GAGCAAAGAC TAAACCACGG CTACTTTCAT  
 160551 GCTAAATGTG AAACATGGTG TACTACACA TGCAAACAAA GAGGAGAAAT  
 160601 GACAATTTCC TCCTTGAAGG TACCTGAAAT TAAAAAATCT TGCCATCTGT

FIGURE 3, page 51 of 188

160651 TCCAAGAAAG AAAAAAAAAA GGAGAGTTCT GCTGAAAAAT TAGGAAATTT  
 160701 CCATCAGAAT GGTGGGATTA TGTAGCTTGC ACTAAAATGA CATCTTAGAA  
 160751 AATTATAATC CTAGGCTGGG TGCAGTGGTT CACACCTGTA ATCCCAGCAC  
 160801 TTTGGGAGGC CAAGGCAGAC AGATCACTTG AGGTCAGGAG TTCAAGACCA  
 160851 GCCTGGCCAA CATGGCGAAA CCCTGTCTCT ACTAAAAATA CAAAAATTAG  
 160901 TTGAATGTGG TGGCGGGCAC CTGTAGTCCC AGCTACTTGG GAGGCTGAGG  
 160951 CAGGAGAATC ACTTGAACCC AGGAGACGGA GGTGTCAGTG AGCTGAGATT  
 161001 GCGCCACTGC ATTCCAGCCT GGGTGACAGA GTGAGACTCA GTCTCAAAAA  
 161051 AAAAGAGAAG AAAAAAGAAAT TATAATCCCA CATACATGGT TGCTTATCAT  
 161101 GTGTTTCGGT GAACTTTATG GAATTCGAGC TGCAGGAACC AGACCTACCA  
 161151 TCTTATGAAG CGGGTCATTC TTTCTGATCT GCCAGCCAGG TGCTTCTCAA  
 161201 AAGCACAGGA TTTGGAAATT TCTGGGAGAT GCATCAGGTA CTATTCTGAT  
 161251 TCATCAGATA AAAGTTTGGC CTTAAGAAAA GATAGAATAG TAGAGTGGTT  
 161301 TAAAGGGTGG ACTTGGGCAT CAGGTGACCT GGGCTGGACA CTTGGCCATA  
 161351 TAGAGCTTGG GACAGGTGGT GCCCACACTC TGTGCCTTGA CTTCCCCGGC  
 161401 TGTACACAGG GCTGGTGGTG ACACCTCACC AAGAGGCTTG TCCCAGGGCT  
 161451 TGGCACACAA GTCCTCCTGT ATATCAGCAT CACTGCTCTT CCTACTGCCT  
 161501 CTTCTGCTGC CCTGACATCA CAGCACATGG GTGGCCTCAG AGCATCGGCA  
 161551 GGGGAGCCCA CCGTGAACAG TCTCCTGGGT CCTGAAGAGC TGAAAGATGT  
 161601 ACTTTGTAGG AGCTGTCTTT TCTCTTCAGC CTACAGGAGC CACTTGTGGT  
 161651 CTGAATACCC TAGACCTGTG CTCTCTTCCT CTGCCTCCAG AACCCTTCA  
 161701 GCCACAGCCG GAGTCATGGA TGGTCAGAGT GCCTGAGACT GAGGTCCACA  
 161751 GAGGGGACAG GATGAGTGGG GCCACAGAGC TGGGGAGGAC CGGGGAGAGG  
 161801 CCTGGAACCT GGATCCACCA TCAGAAGAGG GAGCAGCGGT GTGCAGACAT  
 161851 GTCCTCTTAG GGGCCTGTGC TGAAACAGGA ACCTTTGTCT TAGACTTTGG  
 161901 GAGGGGGCTG GGCTGTGGGA ATACGGCTGC CTGAAAGAGG ACCGGCTCCT  
 161951 GATTCCCACC TGCGGAGGGC CCCGGGAGGG AGGAGCCCA GTGTGTCCA  
 162001 GGCAGGCTCT CCTGATAGTT GGTTAGGAAC CACTCGAAAG AGAACACTTG  
 162051 GAGGAGTGGG GGGAGTGCCA GTGTCAGCAA GTTGGGAGCA GAAGAGAGCC  
 162101 CCACAGTGTG GAACAGGTAG CCAGCAGAAC CCACTAGTGG ACGAGAGCGT  
 162151 GAGGGGTTGT TGTTGTTAAG ACAGAGTCTC GCTCTGTTGC AGCACAGTGG  
 162201 CATGGTTCGA TCTCGGCTCA CTGCAGCTC CACCTCCTGG ATTCAGGCGA  
 162251 TTCTCCTGCC TCAGCCTCCC AAGTAGCTGG GATTACAGGT GCCTGCCAGC  
 162301 ACGCCCGGCT AATTTTTGTG TTTTGTAGTAG AGACAGGGTT TCGCCATGTT  
 162351 GGCCAGGCTG GTCTCCAAC CTGACCTCA AGTGATCTGC CTGCCTCGGC  
 162401 CTCCCAAAGT GCTAGGATTA CAGGCGTGAG CCACCGAGCC TGGCCCGAGA  
 162451 GCCTGCAGGT TTTGGTGGGG CTCAAATAGC TACTGGCTGC CCCCAAATAG  
 162501 GGGTGGGGTG GAGAAGTCTC CTCAGATGAA ATGAAGGTCA TGAAGTCCAT  
 162551 CATTTTTATA CCCTACAATC AATCACTTGG GGAAATGGCT AGCCCTTGAG  
 162601 TTTATAAACC ACATATAAAC TTGTAGTATC CATTAAAAAG AACTGCCAGG  
 162651 GGACACGTGG TTTGGCTAGA ATGGCACCCA GCCTGCCATC TGCTCCTGTA  
 162701 TGTAAATTAT TTGTGTTTAT TAACCTTTCA TGGAAAGTTGT TTAAAGAAGA  
 162751 CTGTCTTTTT TTTTCTCCT TTAATACTCA AGTATAAATT CAAAACCTAC  
 162801 TTAAATAATC CCAAGAATT TCTCTCTGTT AAATATTGCT GCAGCTCTGA  
 162851 CAGGCAAATA CACAGGCCTG GGGACCCGGG AGGGCCTGTG CACGTTTGG  
 162901 GGAAGAAAGC CCCCATTGA AGCCCTCCT GGCATACTCC CAGCTACCCA  
 162951 TCCCAGTCTG CTCTCAGCTT GGTATCTTAG AGACTCCCAG GTGGGGCCAA  
 163001 CTGGCTCCCA GGAGTGGCGC TTCATCCCCA GGTTCCACAA GGATCCTTGG  
 163051 GAGTCCTTGA ACAGAGGGCC TGGGTGAGAC AGCATACCCC AGCACTGCAG  
 163101 CCAGGTGTCA GGGCAGGCAG GGCCGATGGG GTGGCAGCCG GCCCATAGGT  
 163151 GACCCAGACG AGGCCAGACC CACACTCCCT GGCCTGTGCT GCCCGCAGC  
 163201 AGTGATCTGA GGGAGCACTC CCCGGCCTGT GCTGCCCCGC AGCAGTGATC  
 163251 TGAGGGAGCA CTCCCCGGCC TGTGCTGCCC CGCAGCAGTG ATCTGAGGGA  
 163301 GCACTCCTGC AGCCAGGCCA GTCCCTCACC TGGAAATCCC CATAGATGGA  
 163351 CCCTCACCAG TAAGGCTTTT TTAGCTGGAA GCTGCCCCCT TGCTTCTCGA  
 163401 TTTTGTAAAG TAAATGGCAC CTCCCATGCC AAAAGAAGGC AGACTTGCTC  
 163451 TTTGCTTGA ATGTGAAAAC ACTGGGAGCA GAAGCAGGTC TGGATTGCTG  
 163501 GGTCTTCAGT CCTTACCCTT CAAGAGGTGC TATGTGCTAG GTGCAGGGCT  
 163551 TAATGTATTT TCACACATGC TGGCTACAAG GTGTGTGTTT CCATCTGCGC  
 163601 CCAGCTTGGG GGCTGCCTCC ACCTTTCCAC AGGCTATGCA CCAAGGTCAG  
 163651 TGGCGGCAGT AGGACAGAGT GGGGGTTAAA CAGGGGCTAG GAGCAATCTG  
 163701 GCATCTCGCC CTCTCCCTT GGCCCCAGAA ATGGAAGCTG GAAGGAGAGA  
 163751 TGCCATGGGC TTAGTGAGT GGGTGAGGGG CTGCTTGAGC CCTCGTGTCT

FIGURE 3, page 52 of 188

163801 GCTCATCTCA TTCCCTGTGC CATGGGCCCC CAGCTAATAA GCACCACGTA  
163851 TCTGGGGAAA GAGTGAGTTA CCCCAGGAC AGGCCCATCC AGCTCCCTGC  
163901 AGAAGCCCTT ACTTCACTTT CATTCCTGCC TGGTCCCTGA GAGCCCACAG  
163951 GCTATAGCTG GGCTCAGAGA GGGGAAGCCA GGGCCAGCA GCTCAAGGCC  
164001 TCTGATTCAA AGCTGGCCAG GGCCTGGATA GAGCAGCACT GGGGGCACAC  
164051 GTTGGTCTAG CAAGAGAGAA AAAATGAAAA GACATAACAG ACCTTTTTTTG  
164101 ATCACCCTGC ATGGAACAGA GTTAACTGAG TCTGAGCACA ACATGTCTGG  
164151 GCAAGAGAGA GAACAGAGGG CCAGTATGGT CCCCAGAGAG GGCCGGGCAC  
164201 TGCCAGGCAG GGTGGCTGTA GGTAAGGAGG GTGCTGGAGC TCCCAGGACT  
164251 GGCCTTCATT GGTCATGGGC CCTGGAGAAG CCAGGTGGCC CAACTGTGCT  
164301 CAGTGCTTCT AACCATCATG AAATCATGAA CGGTCTGGAG GGCGAATCCT  
164351 CCCATGGGGA CTGTGGGCAA GAAGGTGCCT ACCTATCTGT CTGTGCTTAT  
164401 GTTTTTATTT TTCTTTTCTT CCTTCCTTTC AGTTGTTTAG TCATTTAACA  
164451 AACATTGGTT GAGTGCCTGC TTTGAGCCAG ACACTGTAAG GACTGGAAAT  
164501 ACAGCAGTCA CCAATCCAGA CGTGGCTCCT ACCCTCCATG TGCCATGGTG  
164551 GGTGAGCAAC TGCAGCCAG CACAAGTGCC CAGGAGGAAA AGAAGGGGGT  
164601 GTGTAGGAGC ATATAGGAGG AACCCCAAGT CCCCAGATGG AGAGATAGGA  
164651 TGGGTGCCTA GGACCAAGCA ATGTCTAAAC TGAAAGCACA CCACGGTCTT  
164701 AAGCAAGAGA GTGAGGGGGA GTATTCTGAA CTGAGAATTG CGTAGGTGAA  
164751 AGCCCAGGCC AGACAGAGCC CCATATGGGG TAGTGGGTTT CCGCAGACAG  
164801 TGAAGTGTGG CTGGAATATG GTGCAAGGGG CAGAGATGGG ATGGGGCCTC  
164851 CTATGAGGCT GGAGGGTCCC TATGGGCACT AATTGACCCA CTAGTGAGTG  
164901 AGTGAGTCTG TGCCCTCCTC AGAATATCGG GCTGAACCCA CAGACAGGCT  
164951 GGCCTGAGAG GAGCTGGATT TCTTGACTAG GAGGAGTCAG AGCACCACCA  
165001 AAGCACTCCA GGTCCAGACA CACCCAGGCT CAGATTGGAG AACATCATCT  
165051 AAAAAGCAGC CACGTTAGGT AAAAGCTCAG TATTTCCCTT TTTCCAGAGG  
165101 GATGGGCCTG AAGGGTTAAC CATTGTCCCT GGTTTTAAGA AACAGATGTC  
165151 CTAGCAGAAG GGTCTGGGGA CCTCCCAACA CCATGAATGA GTTGCGCCAA  
165201 CACTAGAGAG TGTGACAATT TCAGTTCAAG CTTGGATGTT TAGAACATTG  
165251 GAGTTTTTGC TTTCCAGAT GGGAATCCTT AAATGTTGCA ATTTCTTCTT  
165301 TAAGGCAAAT TAGAGGAATC GAGCTCCGCT TATCACTTTC TTGCACCTGG  
165351 AAGAAATCTC AGATAGGAAT GATTGGCTAT TTTTGGACCT TGAGTGAATT  
165401 TAAATTCCAC ATTTAGACTC CACCACCCAT GTTTGATTTC TAATTAGAAT  
165451 GTGACACTTA CCTTATGAAC ACAAGGTGTC GTGCAGAAGA CATTCTCCAA  
165501 AGGAGGTTGA GGATGCGCAG AAATAAAGGT GGTCCATATG GAACAAGAAT  
165551 GATATTTCTG CAGGTGTATT TAGAGGTAAC AATTTTCTGA TAAATGGAAT  
165601 CTTCAGAAGT ATTCTTTAAA AATCACCAGA TTTGACTTAT TGTGCTTTCG  
165651 TCACATTTAT TAAACTTATT AAGATATACA GGATACCTGT TGTGCTTTG  
165701 AAGAAGGTAT GGTGTGTGTA CTTGGATACG ATGAAAATGA AACAGATAGA  
165751 TCAGGTATAA AGTCTAGAGA TGCTAATGGT GTTGGGTCAG TTGTATATAG  
165801 CAGGCTTTGC CACTGAGTGG TTTTGTGTTT GCTGACTCCA AAAGCCTGAT  
165851 TGAGCCTCTA TGACTCAGGA GAAGGGAGGA CATGAAATTT AGGGGTTCTG  
165901 TGACCCAGGG GGTCATACCA CAGATGCCTC CATATTTTTA ATTCTCACTT  
165951 CTACCAGGGC TCAAGATTAT GTACCACTGC GTGAGCATT TTAATAAACT  
166001 AAATAAAAGA ATGACACCAT GCTATATTAT ATTGGTTTTG CTGAACATGC  
166051 TTTTATTGAC TCTGGTCAAA AACGGATGAG GATTTTTTTT TTTCTTAAC  
166101 CTTGATGAAT AGTAGATAAA AAGCATCAAC ATCACATCTC AAGAAAAGCT  
166151 GCAGAAGAGA AGGCTCAATA AAAATGGATC TGACTCCATG CAAGCATAGC  
166201 TCTATTTAGC ATCTTTCATT CTAATGACTT AATGGCCAGA TACCACAAC  
166251 ATACAATTAG CAACAAAGAG AAGTTATTGG GAGCTGAAAG GGATGCCTGT  
166301 GTCATCAATT TTCAGTCTG TTGTCTCTTC GTGTAACCTA ATAGAAGGAG  
166351 ACTGATAGCT AGGATCTTGT TATCCCATGG CACGGACATG TAGGATTTAA  
166401 CCACTGAGTA GTTTATCCTT AGCCAATTAG CCATTGGAAG GTGATTGCCA  
166451 CCTCAGATAA TCAGTTGAGA CTTTGCATG GAGACTCATC CTCACTCCTC  
166501 CTGGAGGATG CTGTGTGGCC CTGCCTCTGA CCTGCATGTC TGAGAATTTA  
166551 TTGACAGCTC AAATCCACAG AATGGGATTT CGCCATGTGA CAGGGGCTGT  
166601 CCCTACCAGC CCAGCTTCTC ACCATTGTGG GTACAATGCC AGCAACTCAC  
166651 TGGTTGATTG GCAGCATGGC CACCCATACC CATTCAGAGG CATGAAAAGA  
166701 GCTCCACCAG TGAACATCCA CTTGTCCCAG GCCCTGCCAG CCTGGACTAA  
166751 AATCCATGCA AGAGAGAAGC TGGGCTTGCC AGGTAGCCAG TCACTTACTG  
166801 TGTGAAGCTA CCATGTGCGG AGCAGTGTCA GCCGACCCTG CTGCACTGGA  
166851 GCATGCCTGT GGGAGGGAGT GGGCTCTGGT GGCAACATTG CTGGAGTGGG  
166901 GAAATCTGAG TTCTCTAGTC CTGACCTTGC CACCAGCCAT CTCTAGGGCC

FIGURE 3, page 53 of 188

166951 TCATGGAAGT GACTCAATTT CCCTGGACTT TTCCGGGGTT CAGTAGCCCT  
167001 GTCTATCACT TGCTTGCTC AGGCCTCCAA GCAGGTGGCC CTCCTTGTG  
167051 CTGTGCTCCG TGCTGGTGGA TTTTCCACTT GCATCCCTCT GTCACTGTGA  
167101 TGGGTGAGGG CTGGAGGCAC AGTTTGCTTA TCTGCTCTAA ACGTTTCTCG  
167151 GCCACTGTAG CAGATACTGG CAGTGCTCTC ATTGTTTCTT ACACACTGAA  
167201 GGCATCTTTT GCAACTCTCT GTCTCCCTC GGGGTGCTAC CAGGATGCAG  
167251 GGGCATGTCT GGTCACTGCA CAGGGCAAGC CAGGAGTGCT GGGAGTTCAT  
167301 GTGTCCAGGA GTAGCCTTCA ACCAACAATG AGCAAGAGTT GCTGGATAAG  
167351 TACCAGCTCT GCACCCCTCA GGTGCAGGAA GGCATCCTGC CCCATCTCCC  
167401 AGGTGCCCTT CTGGCAGGCT TAATCCCAGC TGCCCACAGT GATAACCTGC  
167451 TCATTAATTT GCCCGTCTT GGCTTCTTTC TCTCCCTTCT TTCATTTCCC  
167501 CATCTCCCTA CCAGTGCTTC CTAGGATATC ACTTCCCAAT ATATTTGCAT  
167551 TCAATTCCTA CTCAGAGTCT GATTTTCAGAG GAACCACATC AAGACTGCCC  
167601 CAAGCCAGGC CCTGTGCTGT GCAGGCCCTG ACACCGGGAG TGTTTTCTTC  
167651 CTTTTTCTGA CTATCCTCAG GAGCAGGGCT GGCCCTGACC CAGACCCAGG  
167701 AGGCCAAGTG CAGGAGGCAG TAGTCCACTG TATCTGAGCC TCTAGGACAC  
167751 ATTCTCCTC TGTGTGGTGC TGAGGTGGGC CCAGTGGAGG TGTGGAGAAG  
167801 TGGTGGGTGA GGGCTGGGGG CGTGGTTCTC ATGTCTGACC TGAAACGTGT  
167851 CTTCACGCT GTGTCTGGGC TAGGCCTCTT GCAGTCTCCA CTGTCTTCTC  
167901 TTCCCCCTGC TTGGACATTC CCAGGCCTCT CAGAGGTTGT GTTCTGCCAG  
167951 TGGAACTACT CAGGCCACTA CCCTGTGCCT CCAGGGAGGT GACCCAGCTC  
168001 CATGGAATAAC TATTAGCCCT CTTGGCACA TCCATCCTGG GGAGGCGATA  
168051 AGCTAAGTCC AGTACCGACT GCTTCTCCCA GGAAGTTGAA TTTAAAGTCT  
168101 CAGCTCAAGC CTGACATTGC CATAAGCAGC TTGGTCGGCC AGCCAGATGT  
168151 AAGGGCTCAG TGCAGCCCCA CATTAGGCTG GCTGCTGAGA GCTCCCCATG  
168201 GGCCTGTGGA GCAGAAGCTG ACAGATGCTG AGCCTTCCAC AAGAAAGGGC  
168251 CTTGAAGTCC AAACCCTTGC CAAAAACAGG CTTGGTGAGG CATCTTACGG  
168301 GCACCCCTGA GCTGCCACA GCCACCCAAA TGATGTGTCT TGTTCTGTG  
168351 AAGACACCTT GTCAGCGGCC CACCTTGCCC GCTGAGGCC TCTCCCTCCA  
168401 CAGCGCCAG AAATTATTCA GTGAATGGGT GTAGCCCCGG GTTCCAGAGC  
168451 TCTCTCTGT ACTACTCGCC CAGCTGGACC TGCCATTCTT CCACAGCCAG  
168501 GGCTTGTGCT CCAGGGTGAC TCTTCTTTC CTTCTCCCG ACCCCAGCAT  
168551 GTCCCCCACC CCCAGGGCTC TGCTCACTAA GAAGTGTGGG TCTGCAGCAT  
168601 GACTGAACAG ATCCTCTATG CTTACAGTA ACACAGATCA ACGTCTGACC  
168651 CCTCCAGGG TGTCCAGGCC CTGAATAAAA CAATGCCTAC TACTGAGGAA  
168701 GTGAATTCCT AATGAAGGCA TTTCTAGCAC TGATGGTGCC AGGTGTGGGG  
168751 AAGAGGGTGG GGGTGGGCTA AGTACATGAA AACCCTGTAC CTGCCCCCTT  
168801 CGGCAAAGCC TTCCAGTGG TGTGGCCTGC TCTCCCATGT GCATCTGGAG  
168851 CCTGCACGCT GTCAGGCACA GCCATCTTTG GAGAATGACC CTCTCTTTC  
168901 CCTCATAGAT ATTGGTACCA GAGCTTGAC CACCTCTTAT TCTAAGCCCT  
168951 GTTTTAGACG AAGGGAGAGA TCAGCCCCAA GAGGGAAGGG ACTCTCCAG  
169001 TTACCCCCAC GAGCTGGCAC TTGAAGACCT CTGAAGCAGG AGGGATGAAG  
169051 GCAAGGCGTT TTCTTAAGTT AGCTAGCAAC CTGGTCTCC AGAGCTGTTT  
169101 CTTTTTAGCG GTAGAAAGGA CAGCCAGCCT CCCACCTGAC AACAACAGAA  
169151 TGAAAAATTT AATGTGTGGT ATCAATCGCA GTCCACCCA GAGGCTCAA  
169201 ATAGCTTTTG TCCTGATTGA AGGTAGAAAT TCATGGCTCC AGGAGTAACC  
169251 AAATATTGGC AAGTTTGGGC CCGGTCATGT CAAAAGGCTT CTAAAAAGAA  
169301 TGTTTTATTT AAAGTCAATA AATAATAGAT TCAAAGGTCT CATAGAGTTC  
169351 TAGAAACATA AAAAGGAAGA TAGGCCTAGA CACTCTGTCT CTATTCCCGT  
169401 TGTCCACCCT GTCCACCCCA CCCCATCCTC AGGTGGCCCA AACTGCTTAG  
169451 ATGTTAGCAA GGGCTGGGAG AAAATCCCTA CAGCCCATCA CTTTCATCCA  
169501 AGCTATTAGG GAACACACTT GGCCATTTCT CTGTCCAAGT TTCCTTCTAG  
169551 ACAGTGTTAC AATAAGTAGA ATAAGAGCAA GACAATGTGA CTTACAGGT  
169601 ACATGCTTTA TTACCTACAC TGAATTCAG CAAAGTGGGC AGGAGGAATC  
169651 AAAGGCGCGT GAGGTTCCAG AAGATCTTGA GCATCCGCGC TCATCCAGC  
169701 CCTTTTTTAT ATAATGCAAG TTGTTTCTCA CATAACCCCA TTCTTAGCCT  
169751 GCAGCCAGAT ACCTCCCTAA CTCCTCCTCA GACCTTCCCC AAAGGCAGAG  
169801 CTAAC TAGAT CAGTCTGCT CATCCTCAA ATCAAATTTA TATCTTGCAT  
169851 GTGGGTTTTT CTCATTATAA TGTCAATTTCC ATGAGGTGTG AGCCCCATTG  
169901 TCAGGGCAAT CCGGATGATG AATTGCACT TCAGCCTTCA CTGAAATCTT  
169951 TACTTAGTCA AACTCCACT GTGTTCTCA CTCGTCCCAC ACTGTGATC  
170001 ATGTGAATGT AAAGGTTCTG CAGTTTCCAC CAGATCCACC TCCTTCTCC  
170051 ACACCCTGTA TCTATTCTC TACATCTTAA CGACATGTAC ATGTGTCCCT

FIGURE 3, page 54 of 188

170101 AAATTCAGGG ACTTCATATA TTCTTTTCTA TTAACAACCC CTAATATAAT  
170151 TCCTACCACC AATATCATAT ATTCTCCTTC CAACCAATAC CATCTGCTGC  
170201 ATGGATATAT CCTGGAAAGG GTTTTGAAAT ACCCACACCA AAAAAGCTCTA  
170251 CTAGCATTCT GGAAGAACAA ATTAAATCAA TTCATGACTT CTTGCCTGTA  
170301 AGCACTGAAT GCCAGAAGAT AATGGAGCAG TATTTGGAAT GTTTCAGGA  
170351 CAAAAGATTA TGATCCAAGA ATTTGTCTC TGCCTAGATG TTGTTCATGT  
170401 CGAAGGCAAA AGAAAGGCAT TCTCAGATAT GCAAGAGTTC AGATATACAC  
170451 CATCTTCCTG CTTTTTCTTA TTTTTTAAAA GAAGTACTTC AAGTCATGCT  
170501 CCACCTAACT GATAAATGAA TCAAAATATT GTATCATAAA AGAATGAGCC  
170551 ATGAGATTCC AAACAAGTCA ATTAAGAAT TAAGTATATA TAATTAGAGT  
170601 AATACGTTAC AATTCAGTAG CTATAAATTC CAACCAAAGA AAGAAAAGTT  
170651 GGCCACAAA GCTGAAGACA ATAATAATA TAAAGGAAA AGGACAAAAG  
170701 GAGAAAGCTC AATAACATAA ATAATGAAAA AATGTTTAAA AGAAAGTGAA  
170751 GAGAACAAC TCTCAATGAC AATGCAAAGA CTCCAAACTG ACTAAAAAAA  
170801 AAAACCATTT ACTGGCCAAG TGCAGTGGCT CATGCCTGTA ATCCCAGCAC  
170851 TTTGGGAGGC TGAGGTGAGT GGATCACCTG AGGTCAGGAG TCAAGACCA  
170901 GCCTGGCCAA TATGGCGAAA CCCCGTCTCT ACTAAAAATA CAAAAAATTA  
170951 ACCGGGTGTG GTGGCGAGCA ACTGTAATCC CAGCTGCTCG GGAGGTTGAG  
171001 GCAGGAGAAT CACTTGAGCC CAGTAGGCGG AGGTTGCAGT GAGCCAAGAT  
171051 TGCACCATTG CACTCCAGCC TGGGCAACAG GGTGAGACTC TATCTCAAAA  
171101 AAAAAA AAAA AAAA AAAA CCTATTTACT ATATACTATA TACAGTTTGC  
171151 ATTAATGTT GGCTACTAAA TATTCTTTCT TCAAGCTCAA ATCTTAGAGA  
171201 TTAATGAGC AATCCTGTGT TCTGATTCCA TATTACCTTC TCAAGCTACC  
171251 TCAACCATGC CCAAAGGTTG AAATAGTGCC CAAGTGCGGT GACTGTCACT  
171301 GACGGCTCCT ACTTAGACCT CTGCTCTGAT TTCCAGGCCA ATATGTCCAA  
171351 CTGCCTACTT GACAAAGGCA CTTGAGTGCC TCACCGGCAA CTAAACTCA  
171401 GAATGTCCAA ATCTAAATC ATGGTCTTTC CCCATCACTA ACCTTCCTGC  
171451 CAGAAAAACA AATAAACAA ACACCAAAAA AGCACCATTC TCCAACCAGT  
171501 GCTTCTATCT CAGTAATTGG TACCACCCTT CATCCATCTT CCTAAGCCAT  
171551 AGATCTTTGA GCCATCTTTG TCACCTCTTT CTCCTGTAGC AACTCAATCC  
171601 AATCCATCAT TAATATTTTT GGCTCTAAAT ATTACACACA TCTCAAATCC  
171651 ATTCATTCT CTCTATCTCC AATACCACCA CTCTAATTCA AAATACAGTT  
171701 TTTTCTCAAC AAGACTCTCA TAATCACATC CTAACCAGTC TCCCTGCATT  
171751 CTTTCTTGCT CCCCTGGAAT CTGTTTTCCA CCCAAATACC AGAGTGATTT  
171801 CTTTCTAAAA CACAATTGGT GATTATGTCA ATCAGTGGTG TGCTGATAAA  
171851 TGTTTAAACA CCGGCTCTCG GTGGGAAAAG TCCTAATTTA TAGCATTTCG  
171901 CAATTTCCGT AGTGTAATA CTACTACCGT GGATGACTTC AGTTGACCAG  
171951 TCCAGTGATG TCATGGAACA CAGAGTCGGG AAGAGATACG AATCATCTGC  
172001 CTTTATAAAT AGTAGTCTCC AGCATATCAT TGCTTGTAAG ACTTCTGCTT  
172051 AAAACTGTTT AATAACTTCT CAATGCTTCT AGAATAAAGG CTCAAATTCT  
172101 CAGCAGGATC CAAAAGATCC TGCATGGTCT GACCCTATTA ACCTTTCTAG  
172151 CCTCAACTCA CACCATGTTT TCTTTGTTCT CCATGCCTAA CCCCACTAAC  
172201 TGACAACACA CTCCTTCTCG CCACAGGTCA TCCTCCATCT GGAGCACTCC  
172251 CACTGCCTCC CCCTTACCCA GTTTAGTTAA CAAACACATC TTTTGGAGCT  
172301 GAGCCCAAGT GTCCCTCCT TAGGAAAGCC TTTCTGAGC CAATTCCACC  
172351 AAATAAATT GTCCTTCCAT TGTAACCTTT TGTAGCACTT AGCTCATAAT  
172401 GCCATATACC ATAAACATA GGCCACCATT GTAATTTTAC ATATACTTAT  
172451 GAAACTATTG GCTGATGTCT GTCTTTTATA CTATACTTAG AATAAATACT  
172501 ATACTTAGAA TACCTCAGA AGAGGGTAAG CATTGTATTT TTTTGTGATT  
172551 ACCACTGTAT TCTCTAGTG CTAACACTTG GCATGTGGGA AGTATTAATA  
172601 CATTCTGAT GCATGAGAGA ATGAAAAGAC ACACACTTAA AGCCAAATGG  
172651 CATAAGGAGA TTAAGGAAA AAGAGTGGG GAAGTTCTGT TTGTCAAAAA  
172701 CAAAAACAGA AAGCAAGGGT AGCAATTTAG AGGGGAAGTA GAATTCAGG  
172751 CAACAACACT AAATGAGAAA AAGGGATGCC ATTTTATGGT GATAAAATCC  
172801 ATGAAGAAGA TGTGTGGTC ATGGAGCTTT ATGTACAAA TAACACAATA  
172851 TCAGTGATTA CTGTTAGGAA TAAAAGGAAA AATAGGAGCA CAATCGTAGT  
172901 GTGAGAGTTT AACATACCAG TAGAACTGAA CAGAAAGGCC AGGAGCAAAC  
172951 CTTAGAACAT AGTGCTAAC TAACACAGCA TTTCAAACT GTGAGAAAAA  
173001 GGATCATCAG TTATTTTCAA ATGGTACTGG GCCAAATGAT TAAGTATTTG  
173051 TTTTAATAAG GTGGATGACT TCATATTGCA GTTGATATG GTGGCTCTTC  
173101 TAAAGCACT GTCCCAAAAC GCTCTTACAC GACATTAATA AACATAACAA  
173151 GAAAAGGATT CTGGAGTCAA ATACATCTGC AAAACACCAT GGTAAAGCAA  
173201 GTTAAGCAGA TATTTTATT GCAGGACTTT TAACCATCTT TGGTGCTACT

173251 GTGCATGCTA CAATCCCAAG AGGGAAGTAT AGCACATGCT ATTCCCAGAA  
173301 TTAAGTTGAGT ATTTTGTGAG ACTGGTGTTC CATGTTCTGC AGAAATCACT  
173351 TGGGAAATGG TGGCTTAAAA AGTTAAATAA AACACATAAA ATCATAAAAAG  
173401 ACCTCAAATA AATATGAGCA GATATTTTTC TACTTTTACT AAGGTGAGTG  
173451 GGGCTTTTCT AAACCACATA AAAAAGGAAG ATACAATTAG AGACATGGTT  
173501 GATATATTTC ATGACATAAA ATCTTTAAGC TTCTGTATAT CATAAGGCAA  
173551 ATGAAAAACT GGGGAAAAAT AGTTGGAGTT ATGAATGACT TTACTATAGA  
173601 AAGAGCTCTT AGTAATCAAT AAAAAAGATG ACCATCCACA TAGAAAAAGTT  
173651 TGTGAAGAAC ATGAACAGAG GGCACACACA CACACAGACA TTCACATCCA  
173701 TCCACCAAAT ACACATCATT ATTAATATAT AGATTCTGAA CCTTCCTAAT  
173751 AATCAAAATA AGGCAAATTA AACACGTTAA CAATATATTT TTGGCCATGA  
173801 AATCAGCAAT TTTTAAATGAT AAAATTCAGT TTTAGCAAGG ATAGAGTGAA  
173851 AGGGGACTCT CAAATGTAGC CAATGAAAAAT ATAAAATGGC ACCAACTCTG  
173901 TGGCCAGTAA TTTGGCAGTA CTTATTTATT AAGTCTCTTT TTAAACATGC  
173951 TTTTGTATCA GTAATTCAC TTCAGGCAAT TTATCACAAG GAAAAAATC  
174001 AGAGATTGCC TAAAGATTTA TGTTCAGGA TGTTACTGT AGCTTTGTTT  
174051 GTCAAAGCAG AAGTTTTGGA AGCAGCCCAA ATGTCAAGCA GTGACTGGTT  
174101 AAAGGAAATA TGGTGTGCCC CATATGATGA GATATTATTC AGTCATTAAA  
174151 AATTATGACT TGTGGAAATA GTCACAAAAA GAATGTTAAG TTTAAAAGCA  
174201 TGATATAAAA CTACTTCCAG ATTCCAATTT TATAAAGTAC ATATGTATAT  
174251 TTATGTAAT GGAAGAACT AAGGTGAAAT ATAGTAAAT GTGGAGTTAT  
174301 TCCTCTGAA AACATTCCA TTTATTTTAT AACATTCCCC CACAGTCTCT  
174351 CATCTAATCC ATCAAACCAA GTCTTATCAA CTCTACTTCC AAAGCGCACC  
174401 TTGAGTCTCG TCTGCTTCTC TCATCACCAC TACTATGCCC TAGTCAAAGC  
174451 CACCATCATC TTTCATCTTT AGAAACTTAG AAGCCTCCCA TTGGTCTCCC  
174501 TCCCTCCCTT TTTGCCCCGT TGCAGACCAA TCTCCATGCA ATAGCCATAG  
174551 TAATCTGTTT TCAATGTAAA TCAGATTGTA TTACCTTCTG CTTAAAACCC  
174601 TCCAGGGCTT TCCCATCACA CCTTGAAAAA AAATCCTAAG CTTTTCCCTT  
174651 TGCCATGGCT CGGAGGCCCC TGGAAATCCA CTGCTGCCCT CCTATCTGAC  
174701 CTCATCTCCT GCCACGCTCC CTTCCCGCCT TGCTTCAGCC TTTCTAGCCT  
174751 CCCCTCTTGG CCCAGACACC TGCAGTGGCC TTGACACCAG CTCTTCCCTC  
174801 TGCCTGCCGT GCTTCCCCCA GCTCTTTACA GAGCTGACTT CTCCTGAGGT  
174851 CTCAGCTTAA ATCCACCTCC TCCAAGAGGC CTCCTGATCA CCCAGAGTTG  
174901 CCACCTGAC TTTACCTATC GAATCAATGT ATTTTAATTG TCTGCACTCA  
174951 CGACCATCTG ATTTTTTTTC TTAAGTACT CTTTCTGTA TTGTCTAAGC  
175001 TTTGCCCATG AGAATATAAA TTCCATTGCA GGCTGCTATA TTCACTTAGA  
175051 AACTGCCTG GCACTTAGTA GGCAATAAAT GCTTGCCACA TGAATGAAAT  
175101 AGAAATCAA CCAAAAACAT TTCATTGAAA CTGAAAAAGG TAAATCATGC  
175151 CAAACAGCTT GACTTACTAA CAGTGCTCAA AAAAATCAA TACTTTGGAA  
175201 AATCTCCAGG CTTGAAGGGG TGCCCTACCC TTGCGTGGGT ACCCCGTTGC  
175251 CAGTTAGTGG GTAATCCTTC CCCCCTCTAA CCCACCAGC CAGAAAAATGA  
175301 CACTAATATG GACAGGAGG TGGAAATGAT TTGCACAGT TCCCTTACTT  
175351 CAAAAACAAA TAGGACTATT AAGCTTTTGC AGGTCTCTGG GGAAGTTGTC  
175401 CAGGTTTTGG TGAATTCCTA TGAGCTCTAG TTTTAAACAT GCAGGATTTC  
175451 AGCTCTGGCT TTTAGTTCAC TGAAAAAGAG AACAGCTTAG ATTTCTTTG  
175501 CTTGCAACT CTTGAAATTT CTCTTCCCTT CTTTGACAGC CTGAGGAGTC  
175551 AGGGGACAGG AGAATAGAGG AGCCAGATGC CTTTAAATGA GAAAGAACCC  
175601 AAGAAGCCTT TTTGTAAGCC ATTTCTTAGT ACTGCTTAAA  
175651 AGATCTGGGC CATGCCACAC ATAGCAAGGC ACAGAAGCAT ATGAAAAATT  
175701 GCCAGATTTA GTGCTTGTGG CTTGGGGTGT ACTGCAAGGA TCTCTAAAGA  
175751 TGGAGATTTG TTATGTTGCT GTGGATAAAT TTGAATCAAG TGTAATCCAA  
175801 TGCTGCTGTG TGAAATCAG TCAGTTACCA AGTGAGTGGG CCTCGCCAGC  
175851 CACCCACCCA CCCAGCATCC TATCTTCCAT AGGTTTCCAC TTGACACTGG  
175901 AATATAAGAT TTGTAAGGAG CNAGATTTCT GCCTATTTGG TTTACCACCA  
175951 AATCCCTGGT CCTAGAACA GCACATGCAG ATAGCAGATG CCCAATAAAT  
176001 AATTGTTGAA TAAGTTAAAG GAGAAGTAAT ATTTTCCCA TTTACTGAGC  
176051 ACTACTGTG TGCCTCACCT GGCTCAAGTC TCATAGCAGC TCGAACTCTT  
176101 AATTCTCACA CCACCCACAC AAGGTAGGTT TGGCAGAAGG GAGCCTGAGA  
176151 AATTAGGTAC TACAAATCTC TCGTGCAGTG CATGTCTATT TGAAAGTTTA  
176201 TTTCTTTGTC AGGTTATTGT CTGATGTTCA TGGCATTGGG TAGATATTGT  
176251 GGGAGAGGCA GAAATGTCAT TATGAAGAGA ATTTCTCTCT ATTAGCTAAT  
176301 GTTTAGAGAG GCATTGTGAC ATACAAAAAG ACCATTGGTC CTGGACTTGT  
176351 CACATCTGGA TTCCAAATTT ACCTCCTTCA CTAACCTGTG TGAAGTTCAA

FIGURE 3, page 56 of 188



176401 CAAATCACAA CCTCTCTGAG CCTCTGTTTT CTAATCTATT TTTTAAAG  
176451 ATAATGAAAC CAGTCTTGCC CTGCTTGAAT GGAGGTATAG TGAAGTGCAA  
176501 TGACAGAACA GATGTGATTG ACAACTTATA CTTACACCCT CTGTCTTACT  
176551 GAATTGTTAT TTAACCTCTCA ACTGAGGTAG GTCCATCAGT GTTTGGCTCA  
176601 GTTCATGGGG ATTTGTGTCT ACCCTTGGGT ACTTGGATTT TGCATATAAA  
176651 TGAGTTCTTC TATATAAAAT GGTCCAATG TATCTTGCAC TTAATAAATG  
176701 CTAGTATCAC TATTGTAATT ATTAATGAAA AAAACCCCAA GGATTCATTC  
176751 TGGACCCTGA ATACAATTTT TACCTAGACC CAGGTGGCCA ATGCGTTTTG  
176801 TTTTGTGTGG TATTCAGGTT ATTTACTGAT GTGTAACAAA TTACCCCAA  
176851 ACCCTAGCAG CTTAAAAACA CTACCATTGT ATTTTAGTTC ATGATTGTGT  
176901 GAATAAGGAA TTAAGACAGG GCTCAGCTGG GTGATTTTTT TGCTTCAGGT  
176951 GGCATTGACT GGGGTTACTC AGTAGTGTC GTAGCATTCA GCTGCTGGCT  
177001 GGGCTATAAT TGAGGGCCTT ATCCAGTGTT ACCCACACAT CTAGCATCTT  
177051 GACAGGGTCA GCTGGAAGGC TGGGCTTAGC TATACTCCTC CACCCTTGT  
177101 AGTCTCAGAG TATCTCTTCC CGGTCTCTCC TGCAGGGTAG TCAGATCTCC  
177151 TACATGGTGG CTCAGGGGTC TAAGAGTGAG TGTCCAAGA CATTGATGTG  
177201 GAAGCTGCAA GCCTTCTTAG CTTCAGAAGT CAAGTCTTGG CTGTTCCATT  
177251 CTATTGTTCA AGCAAGTTAC TAAGGCCACA CCTAATTTGA GAGGAGAAAA  
177301 ATTGTACTCT ACGTCTCAGA GGAAGGAGCA TCAGAGAATG TGTTGCCATC  
177351 TTTAATCTAC CACAGGTGGT AACACAGTTC TCTTGGTAGT GGCTGCCCTG  
177401 AGTGATGTGA GAGGTAATA AGAAGGCCAC ATCTGGGTTC AGTGGGAAAG  
177451 TGCCAGATGT TTACCACTGT CTGCTGGGGG AATGGGGGCC TGGGGGCCCT  
177501 ATATTTGCAA CCTTTGACTT AGAAATTTCT CCCTCATGAT GCACCCTCT  
177551 AGGTCTCTCC TATTTCTTTC CTATCAACAT GTATGTGCTG TTTTTCAT  
177601 CAAAAGTCCA TTCTGGTTGC ATTTAATTAT TGTCCACCAG GAAGTTAAT  
177651 AGAACACTTT ATTGTTTACC ACCACTTTGC AGGAATGAAG GGGAAATCT  
177701 TGTTTGTATA AGGTGTCCTT TTCCTCTAAG CCTCCTCTGC GGGGCCTTTA  
177751 CTGAAGACTC TGCTGACCCC CCTGTATAGT TTTGCCAAGT TAGAGTTAAG  
177801 CACAGCCAGC TAAGCATCTC AATATCCAGT TATGGGTGCA TTCTTCAAAA  
177851 AACAGTCAGT GAATATCACC AGTGTTTTGT GTCTAAGGTA CATCAGGAAT  
177901 TTGAGGAAGG GAAAGAGGGA GGAAGAGCA AGCCAATCTG TTATTTTGGA  
177951 AAGTCATATT TTACCCCTTT GTTCTGTGGA GTAAGATTTT GGTATTAATT  
178001 TGGCTAAAAA GACACGGGTG GTGCCGAGGC ATGCCGTAAC AGTTTTTCT  
178051 CCACTTCTCT TGCTAGTTCA TGGGTGCATC TGTGACCAAA CTTGTAAGGT  
178101 CTCTGGCTTG GCTATTCTCT TCCCAAGTCC TGCTGAGATG ATAGTGATGA  
178151 ATTGGAGACT GTATTCAATT CCATGGCAAC AAACATCACT GTCCTAGAGC  
178201 CACTCTCTCA ACCCTTTGCA AATACCACTT TTTCAATTAAC CCTAACCTCT  
178251 GAGACATGTG GAAATCCATG CAGAAGCAGC AAGACCTACC CCACAGGGCC  
178301 ACTCAAATG GAGCAAGACT AGGCTTCAGG GGAGCAGCAA GCTCCAGGTA  
178351 CACATGAACA GCAGGTGAAA CAAAGACAAT TAACTAAATT GGTTTTCTA  
178401 CAATTGTTTC CTCTGTTGCA AAGTTTGCCC CTAGTGTGAA AGTCTCACTT  
178451 TCAACTTACA TTCCACACCC AAGCAGCTTT CTATCTAGAG TTTGAAAATT  
178501 GCTTGGACAA GGAAAAATTG CACCTCACAT TTTCCAAGTG CTTTGTATAT  
178551 CTTATGGCTG TCCAATCTTT CTCAAGTACT AATTATGAGC ATTTATTTAC  
178601 AGCTCACGTC TCAATACTC ATAGTATGCA GTGTGTGTCT ATTACCAATG  
178651 ATTTGCCCAT TAATCAATAG AGATGCGAAA ACAAGAATAT GTGAACCTG  
178701 GCACAGACCC AATTAACCTG AAATAGGAGA GAAGGGACTT TATCCTCTAA  
178751 TTGAGTTACA CTTGAGGTG GAGTGAGCTG ATGGATTCTG GGAGGTCACT  
178801 GAGGGATGGT GGCCTCATGC TGAAGGTGGA TGCTCACGG GGAATGGATT  
178851 CCTAACTTA CCGTGCTCTG TTCTTCTTGT AGACAACCCA GGGAGTCCAG  
178901 CAACCCATAG TACGGTGCAT CCAAGAGTCC AGAAACCCAT AGTACAGGGA  
178951 ATCCAAATGA CTTGATAAGT CTTTAGGAGC CTGGAGATTC ACAATCAAGA  
179001 GGACAGGCCT ACTTTTGAGG AAGGCAGGTT CTGGAGGGAG AGTGAGCTTA  
179051 AAGTCAGCCC CCATTCTCTG TATCTTCTCT TGAATTTGGT GTTGTTCAG  
179101 CTTATGTGGT TTCTTCCCTT CATCCCTGGG GTGGGGAGT CACGAGCATA  
179151 GACCTGGTAC CAGGCAGTCC TGGGGTAGAA TCCTCATTCG GCCTGTGTTC  
179201 CCACCAAGAA AATAGAAATA GGTGTATTA TTTCTACCTC CCTGTGTAGA  
179251 TTGTTGTGGA GATGATCATT TCCAGAGGGC ACTTTAAGCA GAACTTGGCA  
179301 TGTGGTAAGA GCTCAGCCCA CATCAGTGCC ATTGCCATCG TCATCCTCAG  
179351 GCTCATTTGA ATTAAGATG AAGGGGGCAG CTCCTCGGCA TTCATGATTC  
179401 CATGGGCTGT GGGCGTCTTA CGAGCAGATT TCTGCTGATG TGAGCCAACG  
179451 AGGGGCAAAT CAGTTTAACC ACATCTGGGA CCCAGGTTAG GGCCCTCCGG  
179501 AGAAGAGGCT TTCACAGGGT AATGCTCTAT GGAAACTTTA GTGTTGGGTT

FIGURE 3, page 57 of 188

179551 TCTTCCCCTG ATTTATGCTA TCCTTAGGAT CCCACTACTA GGGCCAGGAA  
179601 GAAATAACTG AAGTTCCTGC ATGTGAATAA GAAGGCAGTC ACTTATTTCT  
179651 GGAAGCTACA GCTGAGACTT GGGGAAGCTG CTTAGGATGA TGACATTTGC  
179701 ATTTACACACC ATAACGGAAA TGGTGCCTCT GTGTGTCGTA GTTACTCTT  
179751 AACAAATGAAG CATTGCATGC CCACTACATG CCAGCCCTGG GCTGGCATTG  
179801 ACAATTAACA GAAAAACCTT TTGGAAGAGT CATGTTAAGT TTAGTGGCCA  
179851 TAGAGCAAGG AGCATCCAGG ATGAGAGAGC CCTCAATATC TGGAGTCGAG  
179901 GTTGCTTCTG CAGAGAGTGA GGACAGGAGC CCCTATATGC AGCACCTCTG  
179951 CACCTGGGCA CTCACTTGTG CTGTGTGACC ACTTGGTGCT CAGGGCCTCG  
180001 GTCTCTGCAG CTGCTGCCAT GCTGAGAACA GCACAGGTGC CAGTTCACAC  
180051 AGGTCTCATG CCCAGGATGT CCTTAGCAGA TGCCTCACAG TGGATAGCTG  
180101 GAACCCAGAA TGGACCTGAC CCTTCTGTTG TTCGTGTCCT GTTGGCTCTG  
180151 GACAGGGTAC CCTCCACAAG CATGTCAAGC AAGGCCCTGG GCAGCCCCTA  
180201 CCCATGGTCC AGTTGGAGGT GGCAGCAAGG TGAGCTTAGT AAGGCACCAG  
180251 CTTAGGGCAG CTAGGGCAAG CCAGAGAGTC AGAGATCACA GCCCAGATGG  
180301 TGCAGCAGGC CCTACTTCTG CCATGATGCG TATGACAGAT TACATCATCT  
180351 GTCTGGCATA CCCAGGTAAA ATAGATCAAG AGTCCTGCCA GTTCCACACA  
180401 TTGGCTGCAA TCCCTTTTAT ACACACACAG TTTTTCATCG TGTAAGTGTA  
180451 TGGCAATGAT ATTATTACAG GGATAAATTT AAATCCACTT GAAATTCATT  
180501 ATCATAAAAC AACTCATTTT CAACTCAGCA CACCTGAGGT ATTGTTATTC  
180551 ACACATTACT TGTGACCTCC CAACTCACAC AAGTTGATAT CTGGGTATAG  
180601 AGTGTGATTT TTCTCCCAT AGGGACTCCA GAAGAGTTCT TGAAATAGCT  
180651 GCCTCCCCAG CTCACCTCT CACCCCTTGT GCCTGCCCAA TGTTTCCAGA  
180701 AGGCGCAACT ATAGACAGCA AAGGTCCTGT GTGCACCTCC CCAGAGAAAC  
180751 CCAAACCCTC ACACTTCTCT GGAGCCACAT GGCCAGATGA AACCTCTGAG  
180801 AAGGAACCAA AGCCTTGTCT GTCCTGATGG CAGAAGTTGC AACCTGTAG  
180851 GGCTTCTCAA CATGTGATCT AAGACCACAG CTTTGTAAAC TAACTCAGCC  
180901 ACGGTCTCTAG TTAAAAAGGC ACATTCCTAG ACCCTGCCTC AGAACTACTG  
180951 AACAGAGTCA CTGGGTGTTG AGTCCAGGAA TCTGCATTTT TACCCCTATC  
181001 GCCCCCGCCA TTCCCGCCCT TCCCCCGCC ATTGCGTGCA CTAATTGCTG  
181051 GAAGCACTCA TGAGGAGAGC CGCCTGTGTT GTGTAGAACT CCCACCCCG  
181101 CAACACACAC TCACTCACCC TTTCACTTAC CAACAGTTTCT CTGGGCTTGG  
181151 GAGGTCTGGA GAAGGCAGTA GCCCTGCAAA TTGAGAAAGG CAAGCCTCGG  
181201 AAGTGGACTC TTATATCTCT ACTGCCAAAA GGGGCTACAT CCTCTCAGGC  
181251 CCCTGGGTTT ATTCTTGTAG AACAGGGCTC AGCTGTGGGA GCTGATAAAA  
181301 CAAGGCACCC TTCCAGTTAC TGAGCACCTT CTGGTGGCCC ACCTGTGCT  
181351 GGGCATTGCA CATGAGCCGT CTCTCGTCCT TGGGGAAGAT AGTAGTTGTT  
181401 ATCCATGCTC TATAGTGTG GAAACTGAGG CCCAGAGAGG TTATGTGGCT  
181451 GGTCCAAGGT CACACAGCTG AAGTGAGATT GTAACCCAGG GCTGCCTGAC  
181501 TCCAGAGCCT GTGTGTTCTC CAGTGGTGAC ATTGCTGGGG TAGTCTGGG  
181551 GGGCAGTGTG AGCTAGTTCA TAGGATGGAA GAGTACTGTG AGGAATGTTG  
181601 GGGTATTTCA AGGTTTGATA AACCAAAATT CCTCTGGGCC GTTGGGCATT  
181651 TGAGAGACGG AACACTGAGA ACATAAGACA TGCTGAGATT TAGGTTGTTT  
181701 TAGAACCTGA AATCTCAGCT TACTCTCCC AGAACTTGTG CTGACTTTCTG  
181751 GAAAAAGGAA ACATTTTATG CTGGTTTGGG TTCTGGATTG CAGTAGCAGT  
181801 GGTGTTTGCT AAATAAAGA AGGGAACCTG AGCTTCTATC AGTGCATTAT  
181851 TAAAGCAGAA CTGGCTGACT GTCTCCCTGG GAAATAACGG GACTGAGGCT  
181901 TGTGCTTCCA GCCAGAGATT GCTCCTCCAT AGCCCCATT GCCACCGCTT  
181951 CTACTACTTT TGCTCCACT CCCCAGCCAC CCAGTGATCC ACCCTGCCAG  
182001 AATGCACAAT GCCGGCATTG ATCATTCCCC AACCCACGGT ACAGTTCAGT  
182051 TTCTCTGCT GCTAATTGGC CATGAGAGCT CCGTTATGAG GGATCAGAAT  
182101 TGTTAGTCTC TTCTAATGA TCTCTGTCTG GAGACCAACT TCATGACATT  
182151 CTCCAATTAG GGAGTGCAGG GGGGGCAGGG CAGCGCTATT CATCTGCCCA  
182201 GAACCCCAT GAAGTGACAT GGGCTCATT TGCAGGAGAC CCAAGCCACT  
182251 GGTCTGCGG CTCAGACAG CCCAGGAGG CCACGGAGG AGGTCTCCCC  
182301 CTCTCACCTC CCCAGACTCC CGGCTATCCT TTGCTCCCTG TGCTCTCCCT  
182351 TCATGGCAAA GACTTTCCTT TGGTCAGGCT TGAAGGACAA CACTCTGTCT  
182401 TCTGCTAGCA CACTCTGTGC TTTAAAAATT CCTAACTGGG AAAGATGACT  
182451 TCTTTTGAGA TCAAAGGCAC ACTCTCAGGG ATGTTGGGGC AATGAGGAAG  
182501 GTGAAAGCTA CAGAGGAAGT CAAGACTGGT CCACTTCCAG CTCCCCATAT  
182551 GTGGAAGAAG AGAAGACCAA GGCCAAGAGA GAAGGGTCTT GCTCAGGGGG  
182601 GGTCCCCAGC ACTTAGACAG GAAGACTAGA GCCCCCAGC TCATTCTGCT  
182651 TTCCCTTCTC CTCACCCTAA CTTCAAATGC AGGCTCTTTA TCCTATGTC

FIGURE 3, page 58 of 188

182701 CTGTTCTCCC TTTGGACCCA GCCAGCTTCT GGATTTCCTC CGCCACTTGG  
 182751 CTTATCGTGC AGTGGACAAA CCACACGGCT ACACCTTGACA GCCAGAAACT  
 182801 GGATCATAAG CTTTGAGGGC AGGATCCATA TCTCCCTTAT TCTCTGCTGT  
 182851 GTCCCAGGAC CTAGCATCTC ACCCAGAGTA GGAACACAGA ATTATTCAAT  
 182901 GAGTGAATTA ATTAATTAAT GCTTTAACTT TAAAGTTCAA ATGTAGAGTT  
 182951 TCAGAGAGGA ACCCAGAAGG GCTATTCAAA GAAATGAATA TCCAACAGTG  
 183001 GAAATTCAGA TATTACAGAG TCTTGGGAGG TCAGTTGGGC ATTAATTCTT  
 183051 TCCTACACAAG AGTCTGCTAA TTACTTTTCC AGGTTTCTG CTGAACAATT  
 183101 TGAACCTACA TTCGACATAG CTTTCCCTTT TGTCTCTTTC TTAATATCTC  
 183151 AGCACAACTC CTGCTGTGGG GCATTGTTAA ACCTCAGGCC TGGAGGGTTT  
 183201 GGCATGCGC GGTAAACAGC TTTGCCACCT GGGGATGGCA TTATCTCTGC  
 183251 CAGCTCTAG CTGACTTGCT CTGGGTCTCC TGCTGGGAGA CAAGACCAGG  
 183301 CTGGGACAGG CCATTCAAAC AGCTTGAGAG CAGCTCTTAA GACAAACCTC  
 183351 GGACTTAGCT AAGGTACCTT TTTTTTTAGG TCACTTTGAA GAAATCTTAA  
 183401 TGTAAAAAG ATTACAAAC TAAAAAAGT ATAATAAGT GTTGTCAAAA  
 183451 ATCTGTAACA AAATCTACAT CAAGTCCTTA TGGTGTCTGG AACATAATAA  
 183501 ATGTGCAATA CATGTGAGCC CGTAGATCTT TTCTATCAAT ACTCACTTGA  
 183551 AATAGATTAA TCCACAGTCT AATAGTTAGA CCCAGTCTGA TGCGCATAAG  
 183601 AAATGTTGCT ATATCTTTTG TTTTGTCTT ACAGATTTTC TTTTGATTAG  
 183651 GTTATCTATT TGATGGGAAG GGAGGAAAGG CCTAGCATTT TCTGCACCCA  
 183701 CTGTGCACCA GGAACCATGC TAAGTGCCCT ACATTTCACT ATGGCATGTG  
 183751 CTTCTCTCTA TGGGCTTCAG GGAAAGGCTT ATTCTCCCAT TTTCCAGATG  
 183801 GGAGAATTAG ACTCAAGATC TCAAGATCGT TAGACTCCAA AGCCAGTACT  
 183851 CTCTCCTTTA CGTGGTATTT AGAAGTGAGC CCAGCTATGG GAATGCTGCC  
 183901 TAGTGACCAC ATGGTCACTG CCAGCTTCCC TGTCCAGACC AGCCTTCCCT  
 183951 TGGCCTGAGA TGTGCCATAG TGCCTCTCAG AGGACACCAT CACGTATTCC  
 184001 TGTAGTGCTT GAGTGTACC AACCTGGAGA CGCCGTGGGA CAGCACAACC  
 184051 AGGGAAGTCG TAGAGAACC AGGTGCCCTT GGACATTCTA AAGACCATCA  
 184101 TCTGAGAGAC TGCTCGGAAA TGCAAAGCTC ACAAACATG TCATTTCTCG  
 184151 TCTCTAAGGT ATTGAATACA AATATCATCT CCTTTTATCT CCCATCTCCA  
 184201 AAACAGTCCC CTCGGGTGTG GTCTCTCTCA AGTGCTCTGT AAACCTCCCA  
 184251 AATTGTCAGC CGGTCCCAGG AGATGCTTCC ATCACACTGG GTGATCATCT  
 184301 CATGATAACT TCCGAACCTG CCTCCTGCAC TGTTACAGGG TCTGGGTGGT  
 184351 TACCCGCGCA GCAGAATCAC TCAGCAAACG CTTGGATGTG CACTGACTTT  
 184401 GAACGGCTAG AAAGTTTAGG GGCACACCT GCCTCGGAGC TGCTGCATGA  
 184451 CTCGGGTCTG AGGTGTCCCC TGAAATCTTG GGGACAGGCA CTTCTTCTGC  
 184501 TGGCGTCAGA CAGAATGTGG TCTCCCCACA GGGAGCCCAG TCCGATTCTG  
 184551 CAGAGCCCGG CTCGGCCCTG CTGGTCTGCG GGTGCCCTTT GCCCTCGTGC  
 184601 ACACAGCGAC ACCTGGTGGT AAGCTGGTGA ACCGCCGGA CCCCAGCGCT  
 184651 GTTCTCAGC TCTATGCTGG GCTCCAGCTC ACGTGCGCTG TGTGCACCGA  
 184701 GGGACTTGTC CTGGCACGTG CACACCCAGT CTTGTGCACC ACCGAGTACT  
 184751 CCGTTGTGAC AAAGTTATAC TCAGTTATGT ATGCTTCTT CCTGCTCTGT  
 184801 GCAGAGAGCA GTCCCCTGGC CTCAGTCATG AGTCATTTGT CTGTACTCAT  
 184851 TCTCAGAGGG GAAGAAAATG AGCTGTTTCT AACTACGTCT ATCGTCACCA  
 184901 CCCCAGTCGC CATCCTTACT GCCATCAACC ACCACCATCC CTGCCGTCAC  
 184951 CACTACCATT GCCTCCACCA CCATTAGCCA TCACCACCGC CTCACCGCCA  
 185001 TCATCCCCAC CACCCCTCGA TGACCACAGC CACCTTTGTG CCTTTACTAC  
 185051 TGTACCCCCA TGCACTCTGT CGCTCCTGTA GCAGGGGCTA ACTCCTCACA  
 185101 TAGCAGCAGA ATTGGGCAGC CCTGCCCCGT GAGGTTCAG GAGGGAGGCT  
 185151 GAGGGCCTCT TCCACAGAGA GTGCTGTGAA AGGCTCTTGG AAGGAGGGCA  
 185201 GGAAGGACCC AAGAGAGCAA GGCAGAGGGA GGATGGGCCT TCTCCAGCTC  
 185251 CTAGCTGGCA GACAGGACAG CACGAGGTAC CGCTGGATG CATTAGGAC  
 185301 TGAAGTTTCT GCTGATGTCA ACGAATGCTG GAAATGTCCC AAGACCCCAG  
 185351 TTCAGGACTG CGCTCATCC AGGTGAGCAG TGCAGAGCAG TCAAAAGGGG  
 185401 CCAGGAAACA AGCCGCCCAT TCATTCTGTC AGTCCAAGAA CAAAGCCAGC  
 185451 GGGCCAGCTC CAACCTGTTG TGACAGAAAT ACCAGGGAT CTTTCTTTT  
 185501 TCTTCCATT TCCCCAGGC AGCAACTGTA CAAATGAAAC TTCAAAACTA  
 185551 GAGCTCGGCC GTTCAGAGCC TGCACAGCAC TGACCTGTTT CTGTTCATT  
 185601 TAGCCTCATT CTCTCAGAAG ACAGAAAGCC TCATTCATCA GAACAATCAC  
 185651 TTCAGCCCAG AGGGGCTTGG GTGTTGTTT TAAGACATTA CAACTTGCAG  
 185701 CCATAAAGGA AAAATGAAAT AAACGTGGCA AGAGTTTGA AGTGGTCTGA  
 185751 ATGACCCAAT TAAACACATA TTTCAAGTC AAACACACCT TTCCTAATGT  
 185801 AGAGATAGAA TTGTTAAATT TCACAAATTA CCATGCTCGA TAATTGTCTA

FIGURE 3, page 59 of 188

185851 AGAGTAATTT GTGTAGGATG AACTGTGTTT CTATTTACTC TCATTCCCTA  
185901 GGTGATGTCT TCTAGTCCCA TGACTTTAAA ATCTTCCATT TCTACATCTC  
185951 CAGGGACACC TCCCTCCTTG ATTTTCCCCA CTTAGACACG TAATAGCCAT  
186001 CCCATTCTTA AAGTAGTTAG AACAAATTCT TTGATTTTTT TTTTTCCTTC  
186051 CAAACCTGGT CTTGACACGT TTTCCCCCTT TTAGTAAACG GTAAACAGCA  
186101 TCCTCCTCAT TGTTACAGCTG CAAACCTACA CAGTCCTTCT TACCCCGCCT  
186151 CCTTCACTCA CACTACCCCTC CACTGTCTCA CCAAGCCCTC CGCTCTTCCT  
186201 CAGTGCCCCC CAGTCCAGGC CCGGCTCTCT TGCTCAGACC TAGGCTGCCT  
186251 CCCTGCTTCT CTTTTGCCA CATTCTGTG AATCCTCCAC CCAGCAGCCA  
186301 GCATGCATTT GAAAGAACAT AGATCATATC GTACCACTCT CCTGCTTAAA  
186351 ATCCACCAGT GGCTTGTTAC TACACTTAGG ACACAGCCAG AGCTCCCCAC  
186401 CCAGCCTGCTG TGCTCTGTCC CCAACTCGCC TCTAACCCCA TCTTTGCCCA  
186451 CGTCCTTCTT CTCTCCTTCA TCCCAATCAT CCTTCTTGCT CTTCCTTGAA  
186501 AACATCAAAAT TCACTCCAC CCGAGGGACT TGGCACTCGG TCTGGACTCT  
186551 GATCCTCTTC AGCTTGTTCC CTCCTCCAT GCTGAAAGGC TGCTCTCTCC  
186601 AAGAAGCCCT CTCTGACCAC CTTATCTAAA TATCCCTGT CCCTTCACTC  
186651 CTCATCTCCT TTTTGTAGTT TCTTTTCTT CATGGTACTT ATCACTTCCC  
186701 GCCTGTCTCC TCCACTCAA TATAAGCTCC ATAAAGGCAG GGATTTTTGT  
186751 ATGTTTTGTT CACTGCTATA TCTTAGCAC TTAGAATATG GCCTGGCACA  
186801 CACTCAATAG GTATCTGAAT GAATGAATGA ATGAATGAGT GAGCATGATG  
186851 CCCACCCAAA GCAGCTTGCT GCCAATCTTT GTGTCCTATG GGCTGTCTAT  
186901 CAAGGTGGCG GGATGGGCTC ACTTGTTATC CTCCTGAGAG CAGCACTTAG  
186951 AGATCATTTT TGAAGACAGC ACATAAGGCG TTGGAATGG CTCCCCCTCC  
187001 TGGACCAGCT TGCCAGTGTT ACCCACCCTT AGGGCAATGG CCACCCCGTG  
187051 GAATGCACAC CACAAGGGCA AGCGAAGAGC TCAGCGAATG GGGGAAACTC  
187101 TTATCCCATA TGCTCAGCTG TCGGGCCTGG GATCATGCAA GGGAAAGTAT  
187151 ACAGACAGCA GGCAGGGGAG TCCCCCGACA GTGGCTGTAG CCAGAAGTGG  
187201 CCACATAAAT TGTAGGACCC ACTGCAGAAG GCAAATGTAG AGCCTCAGCT  
187251 AGGGGTTTCC TTTGGGCCCC CTGCCCCACC CTCTACAGAC AGACAACATC  
187301 CAACAGCTTG CAACCCCTGT ACCAGGATGT GTTCAAAACC TGACTTGAAG  
187351 GTGAGCAAGA GGCCCACTGT ATGCACCATG GTGCTATCAG CCTGGGCAGT  
187401 GACAGCCATA CCCTTGCCCC GCCCTGAGAT GCCTGGTGGT GTGGGCCCCA  
187451 CCATTGCCTC ACCCATACCC ACACCCAGGC CCCTGCCAGG GGTGGAGGGC  
187501 AATGGCAGAA TGCTCCCTCC CTCAATGTGA CCAGGTCCT GTTCAAGGTT  
187551 GAAGGCAGCA GCAGGGGTGA GTGGGGGAGA CCACCCAGGG GATAGGGGTG  
187601 AGAAGCAGGC AGCAGAGAGC CATCCTGGGA TGCTGAGGAG GAGGTGAGAG  
187651 TCAGGGCCAC ACATGAGCCG AGGCTGCAAG CCCTGGCACA TTCTCCACTG  
187701 TCCCGTCACC CTTCTCGTAT AGAACACAAA TTCAAAGAGG ATCAGCAAGC  
187751 ATTTCAAGAC AAGAACCCCA GCAGTAAGCC CCAAGCTCAA GGCCCTTCTG  
187801 AGTGTGGGAC CCTGTATTAC TCTACAGCCA TGCACCCGTG GGCCAGCCCT  
187851 GGCTGCAGCC ATGAACAGAG GGCCCAACAG CATGGGTGTG TGACCCCTC  
187901 CTGTGTTAGA AGCATCTCTG CAGTTTGAGC AGCTCCAGAC CACACCAGGT  
187951 CCCTGTTGTC CTCTTGCTCC TGCTGCTATG GTGGCACCAT CATTTGAGGT  
188001 CAGGGAATTT GCACAGTAGT CCCTGCCCTGA GAGCCCCCTT CATCTTCAGA  
188051 GCCTAGAGTG GGTCAGAGCC CCTGCCAGCC AGCCTGCACA GGTGTGAAGC  
188101 CCTGGATTGC TTGTTAAGAT TTGGGAGGAA TAAAGATTT CTTAAATTC  
188151 CACTTGAGAT TATTTAATCA CAAGTGTGGT TTGAACAAA AGTAAACCT  
188201 GAATATGAAT TATTTTAAAA TTGAGGTATA ATTTACATAC AATTAAATGC  
188251 ATAGATTTTT GTCAATGATA TTCAGCACAT GTATACACCA TCACTCAATC  
188301 AAGATATAAA ACATTGCTAT CAACCTAGAA AATGATCTTT CTAGTCAACC  
188351 CTCCCATTC AAGAGGCAAG CACTGTTCTG ATTTCTAGCA TCGTAGATTA  
188401 GTTTTAGCTA TTTTGAATT TTATGTAAGT GGAACCATAC AGTAAGGAAA  
188451 CTTTGTGGCT TCTTTGACTC AAACCTCAGT TAACACTGAG TTTTATCCAT  
188501 GTAGCTGGGA AAATCCATTG CTCGTTCTCT TTATTGCTAA GTAGTATTTT  
188551 ATTGTATGAC TATTCACAG TTTGTTTGT GATTCTGTG AATGTACATT  
188601 AGGTTCGTTT CCATTGGGA ACTACTATGA ATAAACTTC CATAAATATT  
188651 TTTGTATGTG TCCTTTTGTG AGCATAGTCT TTCATTCTC TTGGATATAT  
188701 ACCTATGAGT GGCAAATAAG CACATAAAAA GATGTTCAAG ATCATCAGTC  
188751 ATTAGGAAAT ACAGATTGAA ATCAGAGTGA TATACCACTA CGCATTTAGT  
188801 AATATGCCAC TAAATTTAAA CAAGTTGAAA GTTAGCAGAC TGACCATAGC  
188851 CAGTGTGGC AAGGATCTGG GAGAACCAGA ACATTCATA TCTGCTGACG  
188901 GGAATGTAAA ATGGTACAAC CACTTTGGAA GATGGTTGA CAGTTTCTTT  
188951 AAAAGTAAA CCTTTTACTT TTACCTTATG ATCCAGCCAT TCTACTCTTA

189001 CCTACTTACC CAAAAGAAAT TAAAGCATAT ATCCATAAAA ATACTTGTAC  
189051 ATAGATGTTT ATAGCAGCCT TATTCGAAAT TGTAATAATAT TAGAATCAAC  
189101 CCAAATGTCC ATTAACAGTT GAATGAATAG ACAAACCTGTG GTATATCCAT  
189151 ATAGTAGAAT GCTACTCAGC AATAAAAAGG AATGAACTGG CTGGGTGTGG  
189201 TGGCTCACGC CTGTAGTCCC AGCATTTTGG GAGGCCAAGG CAGGCAGATC  
189251 ATGAGGTCAA GATATTGAGA CCATCCTGGC CAATGTGGTG AAACCCTGTC  
189301 TCTACTAAAA ATACAAAAAT TAGCTGGGCA TGGTGGCACG TGCCTGTAGT  
189351 GCCAGTACT CCGGAGGCTG AGGCAGGAGA ATCACTTAAA CTGGGAGGTT  
189401 GCAGTGAGCC AAGATTATGC CACTGCACTC CAGCCTGGTA ACAGAGTGAG  
189451 ACTCCATCTC AAAAAATAAA AATAAAAAAT AAAAAAAGGA ATGAACTATT  
189501 GACACATGGC AAACTTTAAT GAAGCTAAAA CCTATCGATG TATTCTATAA  
189551 CATGAACGAA TCTCAAATA ATTATGCTGA GTAAAACAAG CCACACAAAA  
189601 CAAGAGCATC TACTACGTGA TCCCATTAT ATAAAATTAT AGGAAATCCA  
189651 AACTAATGTC TGATGACAAA AGCCAGATCA GACTTGGGTT GGAGGGACAG  
189701 GGAGGGGCAA AGGGAGGTT ACAAAGCGGC ATGAGGAATC TTGGGTGATG  
189751 TGTTTGTGTG CTTGGTTGTG ATATGGTTTC ATGGGTGTAC ATATATGTCG  
189801 AAACCTTTCA AATTGTATGC TGTATATAGG TGTAGTTAAT TGTCATTAT  
189851 ACTTCAATGA AGGTGTGTCC TTAAAAGTCA AATGACTGTA TAGTATAATG  
189901 CTATTTCCGT CCTCTCAGTC ACTCTCCTTA TTCAAGTACC ACATGGTCTT  
189951 ATTTTTTGTA GCTGTATAGT AATTCATGAG TTAAGGTAGC ATTTGTTCTC  
190001 CAAGCTTGTT CTTTTTCAAG ATTGTTTTGC ATATTCTATA TAAAGTTTAT  
190051 TTCTTTATTT CTATAACCAT TTCCATATAA TTTTLAGAAT AGCTTGTCGA  
190101 TTTTTTTCAA GAAGTCTGGT GGTATTATGA ATGAAATTGT GTCAAATCTG  
190151 TAGGTAAATT TAGGAAGAAT CCACATCTTA GATATATTGA GACTTCTAAT  
190201 CCGTGAGCAT ATTGACCTGT TTCATGAATT ATGCTTTTTA CAGAATTTTT  
190251 CATTTTATCT AATTTGTCAA ATTATTGGTG TAAAATTTCT AATACCACCT  
190301 AATAATTTCT GATGTCTGTA ATAGCTATAG AAATACTCTT TCTTTCACTC  
190351 CTGATATCGG TAATTTATAA TATCCATCTT TTTTCTCTT GATCAGACTT  
190401 GCTAAGAATT TATACATTCA TAATTTTTTT AAAGAACCAC ATTTTAGCTT  
190451 TGCTGATTTT TCTCTATTAC TCGTTTTCTA GTTTAGTGAT GTCTTTTCCT  
190501 TACTTTTGTT GTTTGTGCTT CCTTTTGGTA CACTCTTCC TTTTCTTTA  
190551 TTCTTGAGGT GGAAAGTTAG TTCCTGTCT ACTGATTCCT GTTGTTCCTG  
190601 ATCATAAGTG AAACCTCTTT TTTTTTTTTT TTTTTTTTTT TTTTTTTAAG  
190651 ATGGAGTCTT ACTCTGTAC CCAGGCTGGA GTGCAGTGGC GCAATCTCAG  
190701 CTCATGCAA CCTCCGCTC CCGGGTTCAA GAGATTCTT TGCCTCAGCC  
190751 ACCCTAGTAG CTGGGATTAC AGTTGTGCAC CACCACGCCT GGCTAATTTT  
190801 TGTATTTTAA ATAGAGATGG GGGTTTCACC TTGTTGGCCC AGCTGGTCTC  
190851 AAACCTCTGA CCTCAAGTGA TCCACCTGCC TCAGCCTCCC AAAGTGCTGG  
190901 GATTACAGGT GTGAGCCACC ACACCCAGCT GAAACCTCAT TCTTATTGTT  
190951 CCCCTGAAAA TAATGTGTCT TTTCTTCTC TGGCTGCTTC TTATGTTTTC  
191001 TCATTATCTT TGGTTTTAG TTGTTAGATA ATAATTTGCC TTTGTGGTTT  
191051 CCTTTGTATT TATTTTGCTT GAGGATTCCT TGCTTCAGAT ATTGAGTTGT  
191101 CTTTCTTCAG TTTTGTAAAT TTTTAGCCAA TATATTTTCA AATATTCCTT  
191151 CTGCCCTATT CATTATCTCC TCTCCTCTG AAATTCCAAT TACATGTATG  
191201 TTGGTCTTAT TCTTATGTG CCACAGTTCT CTAATGATCT GTTTAATTTT  
191251 TTTTTTCATT CTTTTTCTC TCTGTGCTTC AGTACAGGCC TTTTTTATTA  
191301 TTGACCTGTC TTTGAATTCA TTGATCCCTT TTTCTGCTAT GTCCAGTCAG  
191351 CTCTTAATCT TATCGAAGCC CATTAACTCT TTATTTTCTA TGTTGTATAT  
191401 ATCAGTTCTA CTAAAGGCTT GTTCTTCTC GGAATATGAT TGACTTAGAC  
191451 ATATATTCCT TCATTACTGC CCCATGGCTT TAAAAAAGAT ATGAATTTTA  
191501 GTTTATTTGG CATTTTTTGT TATGAGAACA ACAATCTTTT TCAAACCTCT  
191551 GTATCCTAGT TAGAAGTAGA ATTCTGTGTA CGCAATTTTG GATGCCCTAT  
191601 TTTTCAAGT ATGTTCAATA TTATTGAAA ACTGCAAGTA CAGTACACAG  
191651 AACTTCCCCA CATCCTTTAC CCAAAGACCT CATTCAAATG TTGCCAGCTG  
191701 TCTTAATATG TCCTCGATAG AAAGAAGATT CAAACCAGAG CACTCATTGC  
191751 ACTTAGCTGT CATCTGTCTT CAGCCTACTT CAATTCAGAA CAGTGCTTGA  
191801 GTCATTCTT GATCTTTATG TCCTTAGCAG TTTTAAAAAT TACAGGCCAC  
191851 TTATTTCTAT TAGAGTTTGT CTGATGTTT TTCATGAACT TTTGGCAAGA  
191901 ATATTACTGA AATTATGCCG AGCTCTTCTC CCCACATCCC ATCAAGTAGG  
191951 AATTTATGTC AACTGGTGAC ACCACTGGTA ATGTTAATTT TGATCACTTG  
192001 AGTAAAATGA TATCTGCCAG CTTTCTCCAC TATAAACTTG TCCTGTTTTT  
192051 CTTTAAATTT AATAAGTCT ATAAAAGTAA TAAATGTTTT CGGATGAGAT  
192101 ACTTTGAGAC TATGTAAATA TCCTGTTGTT TCTTTTTCAC CCGCTAATAT

FIGURE 3, page 61 of 188

192151 TAACATGTCT CAATTCTGTA ATCAGAATTA ACTAGTACTG TGATTGCCAA  
 192201 ATGAAAAATGT TCAGTTCCAT CATTTCTTCT ACATTTACAA GTTAAAAATTT  
 192251 ACTGTAAAGA AGAGTTTCTC TTGTCCCAT TTATTGTTC ACTTTTAA  
 192301 AATCAGTTCC ACCAAATTAA CAGAAAGCTA TTACCCATTA CGACCTTACG  
 192351 ATTTTCATGC TTAAAAATGTC CCAGACTTGG CCAGTAGGAG CTTCTTCAGA  
 192401 CTGCCTTTTA TGTCTTTTTT GATGCATCTC ATGATTCTTT AAGTGATTCC  
 192451 TTACTTTCTG GTACAAGATG TTCTAGGCTA TTCTTATTTT TTCCTTGCCC  
 192501 CTTCCCTGGA ACAAACCATT TTTTCAAAGA GCCTTGGTTC TTCTTAGTGG  
 192551 TGAGCTATTT TGAGAAGCAA AGATGTGAGC GTTAAACGTG CTCCTTGCTA  
 192601 TTGGGGTTTT GCTGCTTGCA GATTCTCTCT GAAAGCGGGG TAAGGACCTA  
 192651 TGTATACATA GACACATACA CATGTATCTT GAGCTATAAA CTGTGAGTTC  
 192701 ACTTCAATAC CTCCAATGCC AGTCCAACCA CAGAGTTCAT TCTAGTGTTT  
 192751 CCTCTTTTCA TATTTGTAAT TCTCTTCTTC CATGAAAAAC CTAGTTCCCA  
 192801 CTGTCCTCAA TATATTTATA TACTGTTAGA TTCTCCTGCA TATAAGATAA  
 192851 CCTCCTGCCC CTGCCACGCT GCCGCACCAC TCAGCCACCT TCCTGCACCT  
 192901 AATCCACCTT TGCCACCACC TGCCTCAGCT GCTACCGGAG ACCGACAAAG  
 192951 CCACCCTCCC ACTTGTGATG TCCCTTTTCT CGTGGTGGCT TTGACCCCCA  
 193001 CTTGGCCACC ACCATGCTCT GCCACCTCCT CTTTACTATG ACTTTTGGAA  
 193051 GATAAAACAT AGTTAGAATC TCCTCTCCTT GGAATTAAAA AAAGGTGAAA  
 193101 GTCATTCTTA TGTGTTTAGA GTTGAAATCT AAGTATATTA ACAAGAATCA  
 193151 AAAATAATTT AGTTTGGTT AATGTGACCT GCTCAGAAGA ATATTTTGAT  
 193201 TTTTAAGATT GTCTAATTTT GCCACCATAA GTAAGACTGA GCCAGTACTT  
 193251 AGAATGACTT TTGTCCAAGC TTTAGGTGGA AATACATCAA CGACAGTGGA  
 193301 GGGTAAAGCC TTCACCTTTC GATGCTACCA TCTCAGGAGA GCCGGACAGT  
 193351 CAAACAGGCT TGTCTGACC AACATAGATG AGAGATCAGA TGACATTATA  
 193401 GGTGAGAGCC CACACTGTGG TGGGCCTGCC TAAAGCAAGG CATTGCCTGC  
 193451 TCAGAAGATA CTTCAAATC AACTCAGTCT TTTGATTTCT TCTATCAGAA  
 193501 GTGGCTCAAA AGGAAGTAGT CACTGACCTT GTATTTGTAG CCAGCCACAT  
 193551 CTACATATCG AAGAAAGAAA GTACTGATGC TAAGGGCTTC TAAGTTGGGT  
 193601 TTGGAGGTGG AAGAGAGGTG CATAGGTTAT TGGTAACAAA TGTGTCCATT  
 193651 TTTTCTCTCC ATTGTATCCC ATTAATAGGC TTCTCTTTAT TGTTTAAATT  
 193701 CCTGGTGGCA GGAGAGTTTA AACTTGCTTT TAACATGCAG GTGGGCTCAG  
 193751 GAAAATGAAA ATAGGCTGTC TGGCAATAAC CCAGGCTCCT AGGGTTCTTC  
 193801 TGCAATAGGA ATTGTTCTTG TCTCTTCTCC AAAGGGCTAA ATGGTGCCGT  
 193851 GTTGAAAATA ATACCCCGGT ATTTACCTCG AAGTGTTCCT TTAATTGTTG  
 193901 GATTCTGTTT TTAAGAGTCA TAATCTGACT TTTGCCCTCG GCAACATAGC  
 193951 AGATAAATAT TTTTAAAT CTTTAAAT AACTGATGTC TTGGTAAGAA  
 194001 AATAAGGACT ACCTAGAGGC TAAAAATACA AGTGAAATCA GGAATCCAGA  
 194051 GAGGTAAGAT AGCTGTGAGA CTGACTTTAC CTTGAGGGCT TTTGCCAAAC  
 194101 TAGGTGAACG TTGGTTTGG TTTACATACC CTCCGTGGCT CAGGATACCA  
 194151 AGGACAAATC CCAGGGTCCT TCCGAGGTAG GCATATGTGG AAGGTTCCCA  
 194201 CTCCCAGTCC CCTATATATA TACACCTGGG CCCCTCAAGT GCTATATCTG  
 194251 CAGTGTAAGG GTGAACAAGA AAGAAAGAAA TCCACCCAGT CCCAAGGACT  
 194301 GGCAAGAAAA TGTCTCTGCC TCAAATCTTG GCACTGAGTA GACAGAGAGA  
 194351 AATTTCTTTG AAAATTATATA ACCATAGACT GATCGCCAGA AGGAATTGTA  
 194401 GCTCATATGC AAATACCTG AGTAACCTGA AAAATCTCAA ACATAAAATT  
 194451 TAGTTTAAAC CAGAATGGTG GAGTCTTGG GTGCCCCGCA CAATCAAGAA  
 194501 GAGCCTATAT CCAAACTATA TCTCAAAAAA TTTTCACAGA TTATATTCCA  
 194551 GAAAATGTGA GCTCTTTTAA AAAGAAATCA AAACACCAA AGGAGAAATGC  
 194601 CATGTAAGAA CCAACAAAAT CTGTGAATAA CAAATGATA CCGAATATAA  
 194651 AATATGTATA TTTAATATTT TTTAAAAATT AAAAATATGA TTGAAAATCA  
 194701 AGAGATTATA CAAATGGCCA ATCATCTTTA TGAATGGCTA AAAAGAACTT  
 194751 CTGAAAATTC AAAATTCAAA ACTCAGTGGA AGAGTGTAAC AGTAGGTTAG  
 194801 AAATAGCTGA AGAGTTAATT TAAGAGCTGG AAGACGGATT TGAAAAATTA  
 194851 TACAGAATGC AACATAGAAA AACCAAAGAT GGGAAATGCG AAAGAGATAA  
 194901 GAGATACTTA AATAGAATGA AAATTTGTAG CATATTTCTA ATTAGAATAC  
 194951 CTGGAAGAGA GGGAGAAAAA TAATGGAATA GAGATACCAT TTAATGGAAG  
 195001 ATAGGTAAGG ATGTTCAAGA ACTGATGAAA GATAGAAATC CTCACTTTCA  
 195051 GGAAACCTGA TGAATTATAA GCAGAATAAA TGCAAAGAAA TATGTGTGTT  
 195101 TGCATCACAG AGAAATTGCA GAAAACCAGA GAAGATGTTA AAATTATCCA  
 195151 GACATCAAAA ATGGATTACC TATAAGGGAA TGAAAAGGCT ATCAGGTAAC  
 195201 ATCTCAACAA AGCCAGAGGG CAGGGGAACA AAAGGTTTAT CAAGTTGAAA  
 195251 GAAAAAAAT ACACGAACAT AAGAGTAATT ACACAGCATA AAAAATCTT

FIGURE 3, page 62 of 188

195301 TAAAATTAGG ATAAAATAGA CATTTTAGAC AAACATAAAG AGAATTTGAG  
 195351 GTATAAGAAG GAATTATGAG GAATAAAGAC AGACTCACAA TATACAGTAT  
 195401 TGTCATATAG TTACGTCAGG AAAGGTTCTA AGGTGTTCTA AGGTCTTTCA  
 195451 TGGGGAGGGT TAAAGTGTTG ATTATAGACT TTGGCTTAAT TATACATTTT  
 195501 AAAATTTGAG ATAAACAGTA GAAGAATAAA AGAGATATTT AATTTTATA  
 195551 TGAGCAGAAG AAGAAAATCA GGGTGAAGTA TTTGATTCAA AATAAGGAAC  
 195601 CAAAAGAGAG AAAGAGGACC ACAGAAAAAG GCAAAATAAC AATCTAATAT  
 195651 AAACATAATA AATAACATGT TTATGTGGGG GTACTATAAG GACAATGAAT  
 195701 GAATCACCAC TATATGCAGA CATGGGTGTA ACTAAATATC GTGGGAGAGC  
 195751 AAAAGAAGAA AGTCTCTGAT GAGTACATAG AGTGTGATTC ATTTATATAA  
 195801 AGTTCAAAAA CATGGAAGAC AACATACTGC ATAGAAATAC AAAGGTGAGA  
 195851 TAAACCAAAA GAATGATAAA CACAAAATTC AGGCTAATGA CGGTCTCTGT  
 195901 GTGGCAATGA GGGAAATAGAA CTGGAGAGGG ACACATGGGA AAATTCAAAA  
 195951 TGAAGACAC CGTCTTTTTT CTTTAAATGA ATGGATTCAT CCGTTTGTG  
 196001 TACGATAATG CTTAAGCCAT CCATAGAGTG GATAAGTGTT CTTTCTGTG  
 196051 TACTCATTAT TTAATAGAAA TAATTTAAAC ATTTATAGTT ATTCAAATTT  
 196101 GATTTTTTGT GTGGTGTGAA ATAGGTTTCC AATGTTGTTT CATTCTAGGT  
 196151 GGATAGCAGG TTGCCCCAGC ATCATCTATC AGAGAGCTAT CATTTTCCCA  
 196201 TTGGAGTGGT AACTCTTATT ATACATCTAA TTTTCATATA CATTGGCATT  
 196251 TATTTCTGGA TCCTGTTTTT TATTTTATTG CCAAATCTGC AGTCACTGAT  
 196301 TTGCCTTTTT CTAGTTTGAT CTCATATTGA TTTTATCACA GCAGCTTTCT  
 196351 GGGTTGAATG TTCTAGTATC TGGGAAGGCA CATCCCCCTA CAGTATTCTT  
 196401 TCTCTTATTT TCCTTGGTTA TCTGGGGGCA CTTATTACTT CAAATGAAC  
 196451 TTTAAGATC ATTTTCATCTA AGTCTAAAT GATTGCATTA AATTTGTGTA  
 196501 TTTATGAGAA TGTCTTCCTA CCCACGAATA AGAAATGTTC CAATCTTATT  
 196551 TTATGACCTT CAATAGGGTT TTACAGCCAT TTTTATATA GGTCCCTATG  
 196601 CTTTCTGTG AAATTTGTTT ACTAATATTT TATGGTTTTT ACCATGATTA  
 196651 TGAGTAGGTG GTTTTTCCGT TTTTCACCTC TAATTATTTA TTGCTACTGT  
 196701 TGAGAGGAAT GATTAATTTT GGCATATTTA TCATCTGTCC AACTAGTTTC  
 196751 ATAATTCTCT TATAATTTTA ATATTTTTTC ACTGGAGTCT CTTGGATTTC  
 196801 TAAGTATACA GATACATAAT CATCAAAAAG AGATCGTTGT TAGCTGTCTT  
 196851 TCTTTTCCAA ATGTTAATGA TTATTTTATT GTCTTGCTTT ATTATACTTC  
 196901 CTTTATGAAT AAGAATGATG ATAACAAATA TCCCTGTCTG GCTCCCTGAT  
 196951 TTAATTGGAA ACAGTTAGTG ATTGGCTATT TAAGGAGTTT TCTTCTATTT  
 197001 CTTTGTCCCT AGAGTTTAA ATGGAATTAT TACTGTATTT TAAGACTTTC  
 197051 TTTATTTCTA TTTTCACTCT AGGTTTGGAG ATATGTCTTC TTCTTGACCT  
 197101 TGGAAGACTG GAGTCTTAAT AGTGACCATT GTCTCCTTAA ATTGCCCTGA  
 197151 TATTCTTAAC CTTGGAAGAC TTGACATCTC AATAGTGACC ATTATCTCCT  
 197201 TAAATTCCTT CCTGAAATTC TCCTGATTTT CTTGTGGGCT CAAAAATCAT  
 197251 AGTTCCCCCA AAAGCCTTCT TTGTGCTGTG CTTGATTCTC GTGGCATTTT  
 197301 GGTATTTTGT TGCTACTATT TAAGGTGTCA CTCCTCCTCT GCAGTAGCTG  
 197351 TAATTCATAG CATTTTTCAT GAGGCTGGAG CTCCAGTGT ATATGGTTCT  
 197401 TTTCCATAGC CTGTTTGAAG GCAACACTGA AGTACCTTAA GGCAGTGGTG  
 197451 GTCTCACAGA GAGTACCTGA TAGGGCAATT GCTGACCCTG TGAGCTTCTC  
 197501 ATAGAAGTAG ACAGGTTGTC AGGCCCCAGT GGAGACCCCT GGTCTCCACA  
 197551 TGCTCTTCTG TACTCAGGGG TAGAGCAGAC CAGCCCACCC ATGCATTGAG  
 197601 GAAAGCCAGC TTCCCAAGAC CCTCAGGCC ACCTGTCAGA GGCTCAGCC  
 197651 ACTGCTTGGC TCGGTTGAGC CAGGGGATTG AAGTTGAGAA TAGATGAAAT  
 197701 CAGATTGTCC GATATTGTTA CTAAGCTTTG TCTTGATATT ATCCAGTGCA  
 197751 TGTTTTTATG GCTGATAATC CCGTTGAGAG ACAAGGGCAG ATCCTTGAGA  
 197801 GGAGAAATTG AAATGCTCCT GATTAGAAAA TGGTAGTTTT CTGTGCTAAT  
 197851 ATTAGATATT TTAAGTATG CATTTTTTC TTTAAAAGTA GAATGAAGGA  
 197901 GAAAAGCATG TTGTTATTGT GAGACACATC TATGACAAGT GATCCAACCA  
 197951 AGGCAAGGTG CGGACCGGG CGGCCCTTGT ATGGCAGGTA AAGGGCCCTG  
 198001 GAAGAATTTA GCTCCCATC TGTGCTGGCA AGTCTCCAAG GATAAAGTGA  
 198051 CAAGGAGCAT CACGGCGGCT CACAGAGTAA CTCCACAGTG ATTCTTGAAA  
 198101 TAATTGGAGG CAGCCTGGGG TGTCACGGCC TTGAATCATT AGTTGGTGGA  
 198151 AAAGCAGGAA GGAACCCACG TAGTGGCGCA TCAGCGAGAC GGTGCAGACC  
 198201 GTGGAGAGCA GCAACATCTG GTCCCTTGG CTCCAAGACG GAGGGAGCCC  
 198251 AGAGGAGCTG GGGAAAGTGA CAAAGGAGCT AAGTACCTGA AGGAAAAATG  
 198301 AGGGCCGGTG ACAGGGAATA AGACAGATGC GAGCTGAAGA GGCTTTAGGC  
 198351 AAAGAAAAGG AACTCGGGG TAGGAATATA TTTGGAGGAA GTGTCTAAAA  
 198401 CAAAGCCGTT TTGTAAAAGA AACTCTCCCA AGGGCAGAAA TCGTATTGTA

FIGURE 3, page 63 of 188

198451 CTTGACATTT TTATGCAGCT TTTCTTCCCA AGAAGGTCTC CAAAATAACC  
 198501 CTTCAAAAGC CGGTTGAGAT AACTTGATAG GACAAATAGA GGGAAAAGAA  
 198551 AAAGGTTTGT GCAGTTTTAT TGTAGCCAAA AGACATCCAA GTTAAACAC  
 198601 AGGCTCTGAT GTACATCCTC AATTCACAGA TGTGGGATAA TTTTTTCCAT  
 198651 CTCAGGGATC TCTATACAGC CCTCTCACGT ACCCACGAGG AAAGTGAAGG  
 198701 TTGCATGTGA AAGAGACACA CCTGTAGAT CCCAGGTGCG TATTCTCCCA  
 198751 CCGAGGGCTT TCTACAGTCT CCACTCTTTC CACTCAATCT GTGACCATGT  
 198801 CTGTTTCTGT AAAACCATTT ATGGATTACT CAGCTCTCTA TCCAGCCAGT  
 198851 CTTGGGTCTC TGCAGCATCT TCATCAGATT CAGTCTCCA CCCAGCCCAA  
 198901 TCTGTGCCAG GCCTGGTGCT GAGCTCTGAA TGAAGTGGAG CCTGGTCCCA  
 198951 ACCCTGAAAC CACAGACACT GCCTGATGCC CAGCCTGGAG TTCTGAGCAG  
 199001 CTGTGAAGGC GCTGCTGGGG CCCTGCCTCG GGGCCTGCTG TTCCGTCTAA  
 199051 GGAACCACAG GAGCGGGGGT CCTCAGGCCA GCAGGTTGGC AGCCTCCTTT  
 199101 AGGTGGAGGA GATCTGGGAG GGCTGGGGGG AAAGCTCTGG AAATGGTGAG  
 199151 TCAGGTAGGT TCATTATTGT CACAGACAGC AGATGGGGAG ATGACACACA  
 199201 GTGCAAAGGG CTCCCAGAAG GAGGAGAAAC CATAGGACCT GTCTGTAGCA  
 199251 GGTGAGCCTG AGAGGTTTGC AAGATACGCT GGCATTGGGC CCAGGTCAGG  
 199301 GGATGCCTTT GAAACTGTCA CCAGGGTTCC TCTGGCAGGC CAGCGGCCCT  
 199351 GGTGACTACC TGACACTGCC CTTAGGTGTT GAGTAGAGCC TGCAGTTTGT  
 199401 GCTGTGAGTT AGTTCCAGTC ACTTTGCCCT AAGAATGTAT AATTTTCAGAC  
 199451 TCCCCTACCT TGGAAGCCAG GCGGAGTTTA TAAGGGTCCA GTGAAGCCCT  
 199501 GGGCAAGGG AAATTGCAAG GGAAGCATT CTTTGGGTA TTTTGAAGCA  
 199551 TGCTATTTTG CATCTGCCTT TTTAAAAACC ATTCAATACT TTCAGTATAA  
 199601 ATATGTTTCA CTTTCCATTA AGGCTGGCCT CCCGAAGACA GCAACTACCC  
 199651 CACATGTTCA TGCACCTGAA TCAGTAAAAC CAAATGGCTA CTACTTTTCC  
 199701 AGTCCTATTT ATTCAACCTT TCACCAATTC AGTGTCCGAA TTGAGCACTT  
 199751 ACTAAGTGCC TAGCTCTCTA CATGAATTAT CTCATGTAAT CCTCAAAGCA  
 199801 ATCCTGTAAG GGGCAATCCC GTAAGGACCA TTGTTATCGT CACTTTTAAA  
 199851 TAGGGAAGG AAGGTGGAAC CTTGCCCTGG CTCACACAAC TATCAGCTGT  
 199901 GAAGGAGCAC AGGACTGGGT GGAGGCCAAG GTTTTACTGT GTTACTGTGT  
 199951 TACTTGAGAC CCAGCGGGAT CAACACAAGT ACCGTAGGAA GTTCTGTTGC  
 200001 AGCACTCCCC CTACCCACC CCGCCCCCG TCCACCCCG CCTCAGTGAA  
 200051 GAGGAGCTGC ATCCTCAGCT CGGTACAGTC CCCCACAGCA GCGTGGCCTC  
 200101 TGGCTCCAGC CCCTTCTCCC TCTGCTCCAC CAGGGGACTT TCCCAGGAGA  
 200151 AAGTTCTCTC TGTCTCAGTA AGTCTCAGT AAGTGGCTTG GAGCCTCAG  
 200201 TTCCTGCCTT TCTGGGTCT TTTTGTGAGG CTGGGGGCTC TGAAGGAAGA  
 200251 TGCCCCAGGC AGAAGAAAGA GATGAGAGTC CTTGGCAGCT CCCTCAGGTG  
 200301 ACGTTGGTTA CTGCAGGGAT TTGGGTGGTA TTGAGAAAAT TATCCAAAAC  
 200351 TTGGGAATAA GGGAAAAGA GGGTGGCAAG TCCTCCCTCT GGGACCTTGT  
 200401 TTACTAGATC TGCCCAAGGA TTACTTACTG ATCCAGGCTA GAGGGTTACG  
 200451 TCTTTGTTCA ACTCACAATT TGCCGCTGAT TAAAGGCCCA GACTGTGCAG  
 200501 TGACATGTTA ACTTGACAT TTGTTCCCAG TAAAAATGCA CATGGTTCTT  
 200551 TTTGGTGGAA AAGAGAACCC GAAAGTTTGT GGTTTCTTA CCTGTCAGAT  
 200601 CACTCACCTA CTGTGTGCCT AGCCTAGGCA TCTCATCCCA ACCTTCTTTC  
 200651 TCCAGTGCCC ATGTGGCTCC TCAAGTCTC CTCTGAATCA GCGTCTGCAC  
 200701 TGTGGGCTCT CTCATTAAGA AAGCAAACAC AGCTTTAACA TATGCTCACT  
 200751 TTAGATTATC GTGACAGTCA CATTTTTAAG TTTTGAATAA GTATGCTTTG  
 200801 GCACTTGTGT TTGGTGTGTT ATCTTCAGCT GTGACCAGAA ATAACCACCT  
 200851 CCAAAGCCG TGCCAGGGA CATTAGACAA TATGTAGAAA CCTATCTGTG  
 200901 CTTTGGTTTC ATACAAATTG GTTACATAGA AACTCTTTTG GCAGAATTGA  
 200951 CAGGCCTCCT GACAGATGAA AGGTGTTTCT TCTCTTCTT GTTCCAGGC  
 201001 ATTTCTGACT TTGAAGTCAA TTTGTCAGAC CTCAGGTTAG GATCTGTAAA  
 201051 CATTATGCAT GGCAGGTTGC ATTACCTTCC AGCAATGGAT AACCATGTGT  
 201101 TTCTGTTGAG CTTTGGGATT GGAGAATGTG GTCAAGTCTT TCAGAACTGG  
 201151 TCAAACGTCT TTTCAAGT GCACAAGCAC CTCAGCATA AGGCTGTGCT  
 201201 CACCGGTTGA TTTGAAATC ACCTGTGGTC ACTGAGAATA CATCACATCT  
 201251 GCCCAGCAGT CACCTGTCCA GTTTCAGGCA AAATAGCAGG AGAGGAGACA  
 201301 GGGAGGTGAT GAAGATGGAA ACATCATAGT GGGAGGTAAG GGGCTTAATG  
 201351 GCCAGGTGTC CATGCATGAC TAGGAGTGGG TTTGGGCCTG TGATGTTTAC  
 201401 AGATCCAAGC AGGGCTTCCT TCTGCAGCCC TGTAACCTC CAGCCTTTAG  
 201451 AGAAGTTGCT ACTTAGGCTT CTAAGCTATG TGTCCCTGAG GTGGGTGAGG  
 201501 AGCAGCCATC CTGCAGGCCA GGGTTGCTGA TGTGTGGATG TATCCTGATG  
 201551 TTGGAGAAGC TCACACTATG GACATCTAGA TCCTCCAGGC ATGAGTTCTT

FIGURE 3, page 64 of 188



201601 TGAACCTGAA GCAGAGACCA TATCACCAGC TGAGCAGATT ATCCCAAGTT  
 201651 CAAGGGATTG GGAGTGAGAC TGATTCAAAG CTAGGCTCTA CCACCTACTT  
 201701 GCTGTCTAAC CATAGGCAAG TCACCTGACT CATGTTTCCT AATCTGTAAA  
 201751 ATGGGCATAT ATTCATGCCA CAAATATGTG CTGAGTAGGG CCTCTGTGTC  
 201801 TACTTAATAG AGCTTTAAGG AGGATTAAAT GAGCATCAGA TGAGCTCATA  
 201851 GATTCTAAGA GTTTAGCATG GTGCCTGGTG GGCCTGCCTC AGTAAATAAT  
 201901 AGTCACTTTA CACATGGCCT TCTCTGGCTG GGTGTTAACA CACACATGTC  
 201951 CTTGGGAGGA ATTACAGATT CTCATCCCAA CCCTTGAATA TAAATGAGGC  
 202001 GTTACAGGGT GGAGGTGGAC CTGACGCAGC CCCGGCATCC AGGGCATCTA  
 202051 GGAGTGTGGA GGCCCTCACC AAGGTAGCCT GTAGTCAGAG CTCAGAGAGG  
 202101 GCTGCTCTCT TCCCACCAGC AGCCCTGAGG GGTGCCGAGA GTTTTCTGGC  
 202151 CTCTAAGAGG ATAGACCTCT TTCAGCTGGG AGGGCTGAGT GGTGGGATGG  
 202201 CAGGGCCTCA CCCCACTTCC CAGGTGGGAC AGTTGGGCAG GGTGAAACTT  
 202251 TGCATCTGCC TCACAGCTCC CTGCAGACTG AGTCTGCCTG GTGATGTTTA  
 202301 CTTGGGAGCA GGGCTTTAGG AGCCAGGCCT CTCTTATAC CAGGCCTCCT  
 202351 CTCCTGCGAT GCCAGGTTCC AGGGCACCCA AGGGTGTCTC ACTCTCTCCT  
 202401 TCCCCCAGGT CTCTGCCATC TTCACCGTCA GGTCTCAGGT CTAATCTCAC  
 202451 CTCCTCAAAG AGGCTTCCCT GACCAGAGTA AAGTGTGCCC GCTGCAGCAC  
 202501 CCTGGTTATT TCCTTCCCTG CATTTAACAC CATCTACACT TGTCTTGTTT  
 202551 TTTTGTGTTG CAGTTCACCC TCTTGTGTGT CTTCCTACAC TGTCATGTTA  
 202601 GTGCCCTGAG GATAGGAGCC TATTCTGTCT GAATCCTCAG CACCTGGAAT  
 202651 CGGGACTGGC ACATAGCAGG TGCTCAGTAA ATATTTGTTG GGTGGATAGA  
 202701 TAGGGGAGGA GCTGGCAGGC AGGAAGTGGC GAAGTGCCCC GTTGTTACCA  
 202751 CCCACCCCAT CTTAGGGTAG ACATGGCAGC GGACTGGAGC GTCGGGCCTC  
 202801 TGCTTGGTTC TCACACAAAC CTGAATTCTG CAGCTGCATA CCAGGCACTT  
 202851 GGGTGGTTTC TGCAATGAGA GAGTCGACAC TGACAGGCAC TCTCTGTCCC  
 202901 TGGACCACCT TGCCACGTGT GAGGGTATAA GTTATCTTAA AGCGGGGAAG  
 202951 AATACTGGGA CCGTTATGTC CAATCCCTGG ATGCGCACCC CACATATCTG  
 203001 CACATGGCTA CATGTACATG GCTCTTCCGC AGGCAAAGCC TCGCTCTGGG  
 203051 TCATTGAGAA ACCCAACCAT GACCCAGGC GAGGGCTGCC GCTCCCTGT  
 203101 GTGTTGGTGT GTCAGTACCT GGAAGATAAA GTATATAAGG CCATGTGTAA  
 203151 GGGCTGTATC TGCCCATGGG CAGGCACTTG GCTGGACAAG TACCTCTGTC  
 203201 TGCAGAAGGT GGAGACAGCT GCTGTACTGG GCCAGGGTTC GTGGCAGGTG  
 203251 GCAGATGAGG TTCTTGAGGT TCTTGATGCT GCACACACTG CCTCTGGTCT  
 203301 TCTGCATTCA CGCCTTGCTC TTTTCAGCCA GTTTTGGGCT TTCCAGTGAC  
 203351 TGCTCTCTCA GAGCCAAGCC ATCACCTCAT TGAGGCCTCA TAGTGAGTTG  
 203401 GGGTGAGGTT GTGGAATTCA GTGCTAGGTC GTGTGCTGGG GGCAGTGACA  
 203451 GCCTTCAGGA GCAGGCCTAG GCAGAACATC TGGCTGAGAT GGGAGCAGGG  
 203501 AGCTCCCAAG GCCTGGTCAG GAGAGACAGG GCTGTCAATC ATAGTCAAGC  
 203551 TGGAGATGAG GTCTGAGACA CAGAAAAGCT GTGTGGGAA GAACGTGCCA  
 203601 GCAGGCCGCT GGCATCCAAG AGTGGAAGAG CTCGTGGGTT TTCCCTCACT  
 203651 GCCACTTGGG GCACGTGCC TGAGAAGGGA GCACTCGTTA GTTTTCTTTG  
 203701 GGCCCAGGAA GCGGTTACAG AGGCTGAGTC AGTATTTGGA AGCAAATTA  
 203751 CCCAAGTGTG TGTGCTCTTG GTTGTGGCTG GCTGTGGGAG AACACGGAG  
 203801 GGGCTTCTCG CTCCATGTGG ATGTAGACTC ACTCTCTCTG GGGCCCATCT  
 203851 CAGGACTCAG CCTCCTTTTA TGCCCTCCAC CGGGGTCAGA CGGGCTTGCC  
 203901 TTCCACAACC GCTCAATTAC ACCACCTGTA CCTATCTATG CTCCAGTTT  
 203951 ATGGCAGTCC TGGGTCTGTG ACATTCTTAT TGAAAATCCT TATTAGATC  
 204001 ACAGAGGGAG TCTTCAGCAC CAACTGGTAC CAATAGACTC ATTTCTCCTG  
 204051 CCGCCATAAT GTTAATGTAA CTGTTCCCAT TTCTGACCAT GTTCAGTAAA  
 204101 TTTAATTTGT GTTGAAAAGC AGCTTATTTG GCAAGATGAT CAGTTTTTAA  
 204151 CCTGAGTAAA TGGCTTTCTT GATGACTATA AATTAAGCCC ATTGTACTTT  
 204201 TCATGCATTG TGTTGTCTCT CATAAATACT ATAGGCAGTT GCTGGTAGTC  
 204251 TCACTTGGTT ACCTTTCCCA TTACTGTTTT ATCATCATTG TGGTAGGAGT  
 204301 GGGGAATTCA TTCTGTTTTA ATGACAAGGA GGAAGTGTA ACAAGGGGCT  
 204351 TGTTAATGA GGAGCCCAACC CCTGGGTCAG CATCTGTGTA GCTGTGGATC  
 204401 AGATTCTGGG CCTTACCCCG CCCGGGGTAT CCTCAGCCCT CTGTGGGGCC  
 204451 ATTGTGAAGG GCATATGCAG GGCCTTCATG CTACTTTTGT CTTAATTGCA  
 204501 AGTAATCAGG AATCAAATAT TTGCCGACAG CCAATTTCCA TGTCAGGGAG  
 204551 AACCTGAGTG TTCTTGACAA CTTCAGCAGC CACAGGTTGG CACCAGTGTT  
 204601 TCCTTAACAC TGACCCCTCA GAGTGCAGCC TGCAGGGAAG GCCATGGGAG  
 204651 CCTCCCCAGC AAGTTAAGCA AACGTAGGTG CCTGCTGCC TGTGTGACGC  
 204701 TGGGCCTCAG AGGTGCTCAC TACCATCTGG ACACACAGCT TTCAAAGGAG

FIGURE 3, page 65 of 188

204751 GGGGTCAGGG AAAGTAGCTT CTCCCCCAG CCCCCCATGA ACTGGCTTTG  
 204801 GTTTGCCTGC CTGGGATGGA GTAGGTGGTC TCTGAAGCCC CTTCCAATC  
 204851 TGCTTCTCCA GGATTCTAGT TCTCTTACT CCAGAAGACC CACCTCCACG  
 204901 GACGTCCATC TTCCCTCAT ACCTCCATCC TTCCACTTCC TTCCTGCCCCA  
 204951 CTTTGGAGAA GGCAAGGAA AATGTACCCC TACCGGGTCA ACACATGTGA  
 205001 GGCTTCACCA CCCTCCCAT CCGAGCCCCT AGCCTGGCTT CTTAACTGCA  
 205051 CTGAATTAGC CTTCAGGAGA TCAGTTCTGA AAATTTCTGC ATTTCTTAAA  
 205101 ACCTGAGTAT ACTGGGGCCA CACGAGGAGC AAGGCCTAGC ACCTGTGGGA  
 205151 CCTCTGAGG CCAGAGCAGG GCAGGCACTT TGGGGTAGGA GGATTGAGAG  
 205201 AGGGACACTT GGACTTGGGC TGGTAGCAAG CACTTCATAG AGAAAATGCC  
 205251 TACAACAGTG ACTTGGAGCT GGTTTAGCCA GAGGGAGAAA GCAATGGGGG  
 205301 CCAGGGCACA CGCTCTGAAG CAGGCTCGGA GAGGCCAGGG CACAGAGACT  
 205351 TTGCTCTTG TTTCTTCAA ATGGGCAATT AGTGGGTTCG ATCCTATCTG  
 205401 CATGGGAAGG TTATTAATAAC AGTGATCCCA TGGCAATGCT CTGCGTCTG  
 205451 GCCCTGTCTT GGGAGAGAAA CAAAGGCTGA TATTTTCAGA GCTGTTAGTT  
 205501 TCTTCTAGTA GCGCCAGCA CTTCTAGGG TAACCCATT TCCAACAACC  
 205551 CAGGAGAATC ACGCTAATCA AATATGCTCC ATGGCAAAGC GGCCATAAAC  
 205601 ACCGTGAGTG GGGGGCCTCC AGCCCAGAGC CTCCCTGCCA GGCGCCTGCC  
 205651 TGCCTTCCGC CTCCTTCCCT CCCCGCCACC ATCAACCTTG ACAGGAAGGC  
 205701 GTCCAGAGGG GCCGCTGAAT GCCACTGGGC CTTTATGGTG ACATGCGAAC  
 205751 AATTAGCAAA GTGGATAAAA GAGATTCCCG CCTCCTTAGG ATCTGCACTT  
 205801 TTATACTGCT CAGAGATATT TGACCTTCTA GTTTATTATG ATTCAAGAAA  
 205851 AAGTCAATAC TTCTTAGTTT GCCAAGGCTG GAGGAATTTA AATGAATTAT  
 205901 TGAATCAAGC AGTTAATCTG CCGATAACTG ATTTTTTTTC CTTTCAAATC  
 205951 TGTAATGATG AAAAGCAGAC TTAACCAAAA ACAAGAAAAA TATATTTTTT  
 206001 TCTTTTTTTT TTCTTCTTTT TTGCTTAGAC ATTTTAATCC CATGGGTAGG  
 206051 AGCCGGGGCT AAAAGTTTGG TCATGATTAC TAGGGCCATT CTGTCTTGCT  
 206101 GAGTATTTTG ATGGAGATTT AATTAACACT TAAAGCAAAG TCTTCTGAGG  
 206151 CTGTAAAAAT CTGTATTAC ATTTTCAAGT TCTTTTGGTG TCCCTGTGTA  
 206201 ATTCTCAACT TTCCATCTGT ACCTTTAGTG ACATGTGCTG ATTATCTCAT  
 206251 TTCCAGACTC CCAGAATGCA GTGTGATGTT GGTGATGGAC GCCTGTTTCG  
 206301 CCTTTCACTT AAACGTGCCC TTTCCAGCTG CCCTGACCTC TTTGGTGTGT  
 206351 GAGCTCTGGG TGCTGCTGCC TGAGATCACT GTGGGTGTTG TAGGGTGCAG  
 206401 GGGACACTCA AGCAATGTGG CAGCGCCCGT TTCCAGGGGC TCAGCCTTCT  
 206451 TGCCCATAAC TGCAACATTG TGCTAGAAAG GACTGGGCTG TGGGGAAGG  
 206501 CTGCTGGTGT CTCCCCTGAT GACGTGTGTC ATGGAGAACC ACATTCTCCC  
 206551 CCAAGGAAAT GGCCAGCCTC TGGTCTCCCT ACCTCGGCTA CCCCCACCCC  
 206601 CATCCTGAAC ACTTGGAGCA TGACTTTCTT CTTATGCCAC GTTTCCTCCC  
 206651 TGCAGTGAAT CCCCAGTGCC TACAGTAGTG TACCTAAATT TCTCTGCTTG  
 206701 GCTCTCCAAG TCTCCCAGAA ATCACACCTT GACCCCAAC CCCACCACTG  
 206751 TACAAAATC CTACTCACAT CTAGTCTTCT ACCTGAGACC TGCAATGCC  
 206801 ACCACAGGG CGGCTGGGG AGTCTTGGCT CAAGCCTGCT GTGTTTCTGG  
 206851 GAAAACCTTT CTCTCCTTG CAGGGCCAC TGGCACATCA CCCGCTCCAT  
 206901 GATCTCCGCC ACTCCCAGT ACTTCTTCCA AACTTAGCTC CCTGGCTCCC  
 206951 ATGCTCTTTG CTGATCTGC ATACATGTCA CCACCTTACA GAATGACAAA  
 207001 GTCAGAAAGA GGGAAAGGTA TGACTTGTTT ATCTTTGAGA CCCCTAAGGT  
 207051 GCCTAAGACA CAGCCTGGTC CAAAGTCATG ACATAGTAAA GGAAAGAAG  
 207101 GAAGGAAGGA AAACGTATTG CAGGCAGGGG GTGGAGGGGA CCACTTTTTT  
 207151 AAAAAAGTAT TGATTTAAT AGGCCTCTAG TCCAGGAGGC TGACTGTGAG  
 207201 CCTGGGAGCA GTAGTGGCAG GCTTTGTCTT TCTGTGTAAG GTGCTTCTTT  
 207251 GTGAGCACGG AATAGCTGGG TGTTTTCAAT TTTCAACTGG AAGCAGGAAA  
 207301 AGTAAGCCTA AGAAAGAACC AAGAGTTGAT CAAAAGCCCC CAGCTGGGTC  
 207351 CTAGGTTGGA AAGGTGTTGT GTTTCAGATG TTCAGAGTGA GTGAGCCATG  
 207401 AAACCTGAGC TCTGCAAGGC AGGACACCTT TCTTGGCACC AATGACCACC  
 207451 TCATGGAGGG ACAGGGACTC CTTAGGAGAC CCAAGCCCC CAGGCCCCAC  
 207501 CTTGAGTAGC TTGGCTGCAC AGGCAAATGG AGTCTGTGCT TGTGAGCTAC  
 207551 AAAGGAAGCC CTCGACCCCA GACCCTCTGA GTGTTTACAG CTGACCCTCT  
 207601 GTGTTTGTGT GTCTGGCAGG GCTTTCAGC CACAACGAGC TGCTGGCCTC  
 207651 CTGCGGGAAG AAGTTCTGCA GCCGAGGGAG CCGGTGCGTG CTCAGCAGGA  
 207701 AGACAGGGGA GCGGCAATGC CAGTGCCCTG AGGCATGCAG GCGGAGCTAC  
 207751 GTGCTGTGCT GCGGCTCTGA TGGGAGGTTT TATGAAAACC ACTGTAAGCT  
 207801 CCACCGTGCT GCTTGCCTCC TGGGAAAGAG GATCACCGTC ATCCACAGCA  
 207851 AGGACTGTTT CCTCAAAGGT AGGAACAGGG CCCTTGCCCT GTGTTTTTGG

207901 GTTTTGTGAT GGGTCTTCCA ATGCCTTTTT GACAAGTGAC CTGGGTGCTG  
 207951 AGTCTACAAG TTACATATGT TTAGGAAATA AAGACAAAGA CTGGTGTGTA  
 208001 ACAAAATAGC AGCAGTGGCA TTTTGGTGAT GCATACTCTG TGTCCACCT  
 208051 CCAGAGACCC CTGCCCTTAG AGGAAGCTCC TTGGGGAGTA GAATCCAGGC  
 208101 AGGTCAAAT AAAACCTGGC TGGTACAGGT TCACTAGGGA CCAGGCAACA  
 208151 GGGCACTACC CAGGTCTCCA CATAGGACGG GCCTTTGCAA GGTGTGACA  
 208201 AGGACCATGT TTACCCCTCT GCACAGAGTC CCATGAATCA GGAGGCTGTG  
 208251 CTGTGCATAG AATGTGGTCA GGCAGACACC AGCGCAATGT CTTCCAGCGT  
 208301 GACAAGGACA CAAACTCTGG CCTGGGGCAG TTGTTGATGG GAAGGCATCC  
 208351 CATGTCTTGC CTGTCCAGAA CACCTCTGAG CAAGACAAGG AAGCCCTGC  
 208401 ATGGACATCA GAACATGTCT GTGGAGCTGG GGCCAAGGAT TCATGCTTTA  
 208451 GGCTGAGATT GAGTCAGAAA AGAAGGGAAG TACCAGCTCC CACTAGACGG  
 208501 TAAGAACCAT TAGGGCAGCG GCTATGGCTG TCTTATGCGC TTATGTATTA  
 208551 GCACCTAGCA CTGTGCCCTG CACCAAGAAA ATGCTCAATG GCTCCAGAT  
 208601 GCTTGAAGAT ACAAGGGTCA GAATGCACAT CCTGGGTGTA TTGATGTGGC  
 208651 CCTGGTAAAT AGTACATGCC ATGGCCTGTG GAAGTATTTA TTGTATACAA  
 208701 ATATTGTGTG ACAAATGGG TATACATGAA TTAGGAAGTG TGTAAGAAGAC  
 208751 AGAAGCAGCT TGCAGGCAGA TGGGAACAGG CCCACATAGC CTGAGCTACG  
 208801 AGAGCCCACT TGGAGTTATG TGAGGTCAGG AATGTGCTTT AGGTTGCACA  
 208851 GGGAGGAGAG GAGGAGGCTT GGACTAGACA CCTGCCAAGT GCCTGCAACA  
 208901 CTAGAAGACA AAGGCGTGAG AGCAGTCCAG GCTGTAAAGG CCTGGGCACC  
 208951 AAGTGGGAAG GGGCAGAGCT CCTGCCTCAC CCTCACAGAA CCCCCTGAG  
 209001 GATGGTATGA TGTGTACACA CCTGAGCGGA GGCGGATTCA TGGTGAGGT  
 209051 GGTGGAGCAA AGGTGTGTTG GCCTCCGTTA CATCTATCTG TGTCACCTGC  
 209101 ACCCACCTAA TGGGCCACTC CACTCAGCAG TCGTGGCAGC ATGGAGTGCT  
 209151 AGGCAGGGCA GGGCTTGGGA AATGTGCCTT TACCCGGTGA TGACAATAGT  
 209201 CTTGGACACT TTCACAGCTG TGCTTATGAT GCTAATGCCA AGGTGCTTCA  
 209251 GAGATCATGA GACACATTAT GGAAATGAGG CCAAATGAG CCTAGGAAAA  
 209301 ACGTCCCCAT TCTGGAAGCA CTGCCCAGCC ACGTGCCGCC AGTTCCTCTG  
 209351 CAACCGTGCA CACTAAAACA CTTGACCACT TGCTCCAGCT TTATTGGCCG  
 209401 TGTTGAATTT TATAGACTGA TGTTCATTTC TCTGGTTTCC AATATCCTTC  
 209451 AAATTGCATC TTCCTAAAGG TTTCTATTTT TGCATCAGAG TGTGCACAGC  
 209501 CTCCTCACC ATTGGTTATT CAAACAACAT TTCTCATTTA ATGGGAGGGA  
 209551 AAAACCAGCC ACCACAAAAC CCACCGAGGT GAGGAGTGAT GGGGACAAGC  
 209601 TGGCGTGGAG CGGGGGGCAG GCAGCCTTGA GCAGATCAGG GCTCAGTTCT  
 209651 GCTTACATGCT GATTGAATTT ATCCACCGAA TCCTTCTGAC TCATTGAGGT  
 209701 TTTCACACAT TGTGAGTTGC CGCCCACTTG GTATAGCAGT GCTCCTCTCT  
 209751 TAAGGACCCC TTTTGGTGG AGAGTGGTGC CTGTGAGCTC CCAGAAAGAC  
 209801 CAAGGGTGGC ATCTCAGTTC TGGTACTTCC CAGCTGTGTG GTGTTGGTTG  
 209851 CATCACTCTG CTTCTCTGGG CTTTTCTCTC GACTGTAAAA TGGGACTAAT  
 209901 GGCAGTACCC ACCTGCTGCA GCCATGGAGA GAAGTGAAGG AGGGGCTGCA  
 209951 CAAGCACCAC TTAGCACGCT GCCTGGTGCA TGGCATGGAT TTGGTGTTC  
 210001 TGAGACCTGC CATCATTATT TATTCTAATC CAGCGTGGCC ACAGGCCGAG  
 210051 AGTAGAGAGA TGCACAAACT GTGAAGAACG CAGAGGCAGG AGCAAGGGTT  
 210101 CTGTCTGGGA GGTGTTGGGA GAGATTTCTG GGCCCAGATT ATTTAATGGT  
 210151 AGCTGGAGAG TGGGTAAGGA AGACATGAGT GTCAGGCAGA CACTCATTGC  
 210201 TGGGGCCTCT CCCAGCAATG TCCACCTAGA GCCAGGGCTT CTCTTTCTGC  
 210251 AGATGGCCTC TTGGGTCTGG ACTCCAGTGG AAAGCCTTCA GAGCCTCACC  
 210301 CTCAGGTGCA CGTGTAGTCC TGGTGGGAGG GCAGAAGAGC TGGGCTGCCT  
 210351 CTCCTCGATC ATTCCCATAG GGAGTGCCCA GCAAACAGGA AAGACCTGGG  
 210401 CACTGATTCA CAGGAGCCTG ACGGATGGAA GGCAGGCCAG CCCTGAGGTG  
 210451 AGTGCCTTGG GGTGAGCAGC TCACCTTCAC CAGAACCATG GCTCCAGGGG  
 210501 GGAGTAGAAC GAAATAGATG ACAGAGGCTC TGTCGGGAAC CTCTGTGGGG  
 210551 ACAGAGGGTC CTGGAACAAA GGAGGATATA AAGAACAAGT TCCTACAGTC  
 210601 CCCACCCAC AATGGCAGCA GAATATTTAA TAACAGCTTG AGGTCCACGA  
 210651 ATGACAGTTT GTCATTTGTC CCAATTTTCC AGGGAGTTAT TAATACAGGA  
 210701 AACAAAAAAA TACCTTGTTT TTCATGCAAG CAAAAATTCT AAAATCATCC  
 210751 ATCTTTTATT CTCTATTTCT ATCAGACTTT ACAAGAAGAA GTTGTGACTT  
 210801 CATTCTCTGG GACTTTTATCT GTCCCCAGAA ATCAATATTA GGACAAGTCC  
 210851 TTGTGCAGCT GGAGTGTGTG GAGCAAGAGG AGAGAAGTGA TGGGTGTGTC  
 210901 TGGGCTAAGC TGCTACAGTT CAGAGCTCCC GTCTGTGGCC AGAGGCCCTG  
 210951 ATTTCTGTC AGGGAGGGGG TTCTCCTGAG GACTGGTGGG GGGACACATA  
 211001 GCCTTCACCA CCCTGCAAGG GAGAAGAGGC AGCATTCTAA ACCCATTTAC

FIGURE 3, page 67 of 188

211051 AAGAAAACCTT CTGGTATCAC ATTCCAGTTG CTATGGCAAT GGGATTCCTT  
 211101 GTGAATATAA AATGAAATAT ATCATTTAGG GATCATTAGC ATGTACGGGA  
 211151 AATCAACCAG ACTCAAAGG ATTGCTGCAG CTAGAGTTTA CAGCTTTGAT  
 211201 CCCAGATCTC CTGAGTCACA AGCAGGGTCT CACTGAAAGT CTGGGACAAA  
 211251 AGGAGGTGTG GGAAAGATGT ATCTCTTCTT GTAGCAAAAT TAGAGTCACA  
 211301 TTTTTCCTCA GCACCAAATC CTACCAAGAG AATGCCAAGA TATTGGGTGG  
 211351 ATTTCACTGT TTAACCTTCT ATAGAGTTTG TGTTTTCAAA GTTATCTTGT  
 211401 GACATCGCAT TCCTATTTGT GTATTAGTTG GCACTTTTAA ACTCATTTTT  
 211451 CTTGGTTTTG AATTCACGCT TTATCTCCTA CGCTGTTTAC GAAGATGAGC  
 211501 TTCCCTTTCA GCAATCACTC ACCAAGCCAG CGTTGTATTA TACCAGATGA  
 211551 TACAATGTCA TAGTTGGGCA GTTTTCCAAA CAAACCATGA AATTATGGAA  
 211601 GAAAGGGGAC TGTTAGAGGT TCTGTTTTAA GGGGCCCTT CAGCTTCCTC  
 211651 AGCCTGCGGG CGGTTGCAGG TGGATTTGGG TGCTTCAGAG GGGAGTTCCC  
 211701 AACCTAATGA AAGACAGGAA ATCATTTCCA TTTTGGAAA CAAATTAAAC  
 211751 ATACTACAGG CTCACAAAGA AATCTTTTTT TCTTACTTGT TACTAAGCAG  
 211801 ACATAAAAAC TCAGTATTTT GTTGCAAGTT AGCAGAGCAA ATAGAGCTTC  
 211851 CTGCCAAAAGA GCCATTTTTT TCTTCTTCTT CTGTGTATTT TGTTGCTGTT  
 211901 GTTGTTACTC TGAGTCTTGT TACTTTAGGA ATTTAAATTG GGCCCCACAC  
 211951 CTCCAGGGGC ATTTCTATAC TTCCACAAGT ATTCTCTGTC CTGCCAGGGA  
 212001 AAGCTTCTTA CATCCCCAGC TTGTGCAGCC CAGTCCAGCT CTCAGCGGGA  
 212051 GACTCACTTC CTGGGATGTG TGAGATCCAG CTGCAGGGCT GTGATGCTGT  
 212101 CAGGCATTGA TAGGGGATTT AGTGTAACCT TGCTGGAGCA GTCCCTATAG  
 212151 CAAGAGGTGC TGGGGCTGTG GGAAGCATCA GGGAGGCCA GGCTGATGGG  
 212201 ACAATGTGGC ACGTGCTCAA GGGCACTGCT TTGGCACGTG AGCTTTCTGT  
 212251 GCCTCATTTA CTTCTCTGT AAAATGGGGA TAATAACAGC ACTTACCTCA  
 212301 TAGAGTGTG TGAGTATGAC AGGAGCAGCA CCTGGCATGC AGTGAGCATT  
 212351 CTTCTCTACG CAGTGTCAAC AGCACTAGGG ATGATGCTGG TGCCGTTGTA  
 212401 ACATCACGGC TTATTCAAGG AGCAGATGCA ACAAGCTGTA AGACCCTTGC  
 212451 CCATTATGTG GACAACCTCT TAATGAGCTA AGAGGTCAGG GGTGGTGGGT  
 212501 CCTCTGTGA ATGAGGGGAG AGAAGAACAT TGGCCCTCCA TATTATTATTA  
 212551 ATGAATGACT AGAATTTGAC CTCCAGTTGA TCAAAGTTAA TGATCACCTT  
 212601 CTCTGTCTTG CTAAGAGATG TAAGGAGCCA CCCAAGTTCA TCTAGCAGGT  
 212651 TAGTAGAAAA GCAAGGGGAG AATCAGGTAT CTCTGATCCC CAGTCTGGAC  
 212701 AAAGCTCCTA GAATGTACCT CCGGGCTCTC AGGAAATGCC AGTGGAGCCT  
 212751 GGGGTAAGAA TTCATCTGCC TGAAGATGAG AACGTTTAGA GAAGGTGCTG  
 212801 GAGGAGAGGG GACCTTCAAG GTGGATTTTG AAGAGCAAGG GAAGGTTTGC  
 212851 TAGGTTGAGA GTGTGGGGA GGCTTTCTAG GAGTACAGGC ATGAAGTACC  
 212901 TCCAGTCTCC GGGAAGAGCA AGTGATTATG GGATCCTGGG TGTAGGGGAG  
 212951 AGCATAGTTG GGGATAAAGG CAGACAAGTG GATCACAGCA AGCTGGGGAA  
 213001 AGGCCTTGTG TGCCAAGCAG GGAAGTCTGA ACTCAAGCTG ACCAGTGTG  
 213051 TGTCCAGAAT TGGTGGGTTC TTGGTCTCTC TGACTTCGAG AATGAAGCCG  
 213101 CGGACCCGCG CGGTGAGTGT TACAAGTTCT TAAAGATGGC GTGTCCGGAG  
 213151 TTTGTTCCCT CTGATGTTTG GACGTGTTCA GAGTTTCTTC CTTCTGGTGG  
 213201 GTTCGTGGTC TCGCTGGCTT CAGGAGTGAA GCTGCGGACC TTCGCGGTGA  
 213251 GTGTTACAGC TCTTAAGGCG GCGCGTCTGG AGTTGTTTAT TCCTCCCGCT  
 213301 GGGTTCGTTG TCTCGCAGGC CTCAGAAGTG AAGCTGCAGA CCTAAGGCAG  
 213351 TGCGGACCCA AAGAGTGAGC AGCAGCAATA TTTATTGCAA AGAGCGAAAG  
 213401 AACAAAGCTT CCACGGGGTG GAAGGGGACC CAGGTTGCCA CTGCTGGCTG  
 213451 GGGCAGCCTG CTTTTATTCC TTTATCTGGC CCCACCCACG TCCTGCTGAT  
 213501 TGGTCCATTT TACAGAGAGC TGATTGGTCT GTTTTACAGA GCGCTGATTG  
 213551 GTCCATTTTG ACAGGGTGCT GATTGGTGTG TTTACAATCC CTGAGCTAGA  
 213601 CAGAAAAGTT CTCCAAGTCC CCACTAGATT AGCTAGACAC AGAGCACTGA  
 213651 TTGGTGCATT TACAAACTTT GAGCTAGACA CAGGGTGTG ATTGGTGTAT  
 213701 TTACAAACCT TGAGCTAGAT ACAGAGTGCT GATTGGTGTA TCTACAATCC  
 213751 CTTAGCTAGA CATAAAAGTT CTCCAAGTCC CTACTAGACT CAGGAGCCCA  
 213801 GCTGGCTTCA CCTAGTGGAT CCCTCACCGG GCTGCAGGTG GAGCTGCCTG  
 213851 CCAGTCCCGC GCAGTGCACC CGCACTCCTC AGCCCTTGGG CGGTCAATGG  
 213901 GACCTGGTGC CACAGAGCAG GTGGCGGCGC TCGTTGGGGA GGCTCGGGCC  
 213951 ACGCAGGAGC CCACAGTGGT GGGGAGGCTC AGGCATGGCG GGCTGCAGGT  
 214001 CCTAAGCCCT GCCCTGCGGG GAGGCAGCTG AGGCCCGCG AGAATTCGAG  
 214051 AACAGCCCGG TGGGCCGCGA CTGCTGGGGG ACCTGGCGCA CCCTCCGCG  
 214101 CTGCTGGCCC GGGTGCTAAG CCCCTCGCTG TCTGGGGCCA GTGGTGCCAG  
 214151 CTGGCCGCTG TGAGTGCAGG GCCCACCAAG CCCATGCCCA CCTGGAACTC

FIGURE 3, page 68 of 188

214201 AGGCTGGCCC ACAGAGCGTCA CACGCAGCCC CAGTTCCCGC CGGTGCCTCT  
 214251 CCCTCCACAC CTCCTCCGAA GCAGAGGGAG CTGGCTCCAG CCTCGGCCAG  
 214301 CCCAGAGAGG GGTTCACACA GTGCAGCGGC GGGCTGAAGG GCTCCTCAAG  
 214351 CATGGCCAGA GTGGGCGCCA AGGCTGAGGA GGCGCCAAGA GTGAGCAAGG  
 214401 GCTACCAGCA TGCTGTCACC TCTCAGTGT AGATAAGCTA CTGCAACATT  
 214451 CTCATTTCCT AAAGAGGGAC CGTGAAGCCC AGAGAGGGCT AGTACCTGTC  
 214501 CCAAGTCACA CAGGCAGAGC CAAGCCAGGG CCCAGCCTTT GCTGCTGTGG  
 214551 CAGGCCCTTC AAAGGCACCC ATAGCTTTGT GGCTGTTTTT AGTTAGGGCT  
 214601 CAGCAAGGCA AGTCCCTAAC AGATGCAATT GCTTTATGCT TCTTCCCCAG  
 214651 GAGACCTCCT GGTGCAGAAG GAAGGCTCAG GAGCCATGGG CAGTGGAAG  
 214701 GGCCTCGTGT GCCACTGCTG GGCGGGGCTT CCCTGCTCCG CAGGTCATTA  
 214751 AGAAGCCAGC TGCACCTTCT CCAGGGAAAG CTGGCTCAAT CATCCCAAAC  
 214801 TCACAGAGCT TCTGGACATC AGGAAACCAG ACCCTTGTCT CCTTTCTAAG  
 214851 GAAAGAGTAG GAAACTGAGG GATACCCAGA AGGTTACCAG GGGAACTTGG  
 214901 GGTCAAAAGC AGGCAGAGCC TCTGGGGACA AGCCTACCTT CAGCCTGGTC  
 214951 TGGCCTTGGA AGCTGGCCTC CACTTTCTCT CCAGACTCCC TTTCTGTCC  
 215001 CTCCAGTTGC CCTTCCACTT CTGGGCCTAC CCACATTTCT GTCCAGTAGC  
 215051 CGCTGTTGTT CTTTCACTCT TTGCAAAGGG ATCTCTCTGT CCCCAGCCCT  
 215101 CTTCCTGGCC TTCACCTTAA GCTCCACAGA AGAGGGTTTG GCTGTTTTCT  
 215151 GCCAAGCCAC TCACCTTCAC AGACATCTGC TGAATGCCCA CTTGGTGTGA  
 215201 AGGCTGTGCC AGGACCTGAG GATACCAGTA TGATCAGAAC ACCGGGCTG  
 215251 ACCTCAAGGA ATTTATAGCC AAAAGAAACG CCACACATCT CCACCTCTG  
 215301 GGTATATCCT TGGGAGCTGC TTTAGCCAGA GATGCCTCCA AGACCTCAAG  
 215351 GACAAACGGG AATCTTTACA GACTGTCTCT CATGTTGGAT ACCCTCTCCT  
 215401 CACTCCTCCG CGGATTCTGT CAGCATCTGT GAAAACAAC AGGACTTCAC  
 215451 TGAAGTACA GTTCACTCAT AGCCCCGTAG TCCAGCATCC CTGGGAGCTC  
 215501 AGTTGTCCCA TTTACAGTAT CTGCTTCCAG GATCAAGAAA AGTGACCTAA  
 215551 AACAAATATG TGTGTTCTTT GGATATTTCC TCCAGGTTTT ATGCAAGGAA  
 215601 CTGTCTTGGT GTGAGCACCC CGCAAATGTG CAAGAATATT ATCAGTTCGG  
 215651 CATGTGTGGT GTGCTCCACA GAACTGCTGT ACTTTGAATG AATTAATTAC  
 215701 ATTCCAGTAA TTAATAATTG CTAAGAAGTT ACTGAGCTGA GTAAGTCTCG  
 215751 TGGTGCATTG ATTTCACTTA TGGAAACAAG CTACAGCCTC CGAGTCCCCC  
 215801 ACATTGTTTC CTGCTGTTTT CTGGCATCCT GTCCTTCTTT CTCCAACCCC  
 215851 TCCTTTGCTG TGCACCTCCT AGTCCCGTTG GTTGCTGGCG GCCTAGTCTC  
 215901 TCTCATCTTA AAGCCCAGAG GAGCAAGCTG TTGTCCAGC ATCCTCCTAG  
 215951 GTAGCCTTTC ATCTCTTCCC TGTCAGGCCG CAGAGCATTT TCTGCACTGG  
 216001 CTGTCTCCAC TTCTGCAACT TCCCTGAATT CTGCCCTCTA GGGTCTGCAC  
 216051 CTAGCTCCTG TCCTGTTACC CCGCCACTG ACTTTGCTAA GATCACCTTA  
 216101 CCCTTCTAAA TGCCAAGAAG GCACCTTCCA GGCCTGGTCT TGCTGCATGC  
 216151 ATCCTTCCTG CAGTGAGCTC TGTCATCCTC TCTGCAACCC TGTTCCACTG  
 216201 TCTTCTAGGG ACCAGCCCCC ATCCCTCTGA CTCTCCGTAG ACCCCTCCTT  
 216251 CTCTTGCAGC TGCTTCCAGG TCTTTCCCTT GGGGCTCTCT TCTCACAGTT  
 216301 CCAGCCATGC CTCAAAGACC CAGACTGTCC CACGAGCAA GACCAACCA  
 216351 TATCTTCATC CCTGACCTCT CCTCACGTTT CAGTCTACCT CTCATTCCAC  
 216401 CTGGGATGGT CCATCCCACC ATCATCTCCT GGCTGGATGA CCTCTATGGC  
 216451 CTCCTAGCTA TTCTCTGAGC CCCGGGTGAG ATGCTTCTTC AAATCCACTT  
 216501 TCCATATGGC ATTTAGAGTA AGCTTTCCAA GATGGAACCT TGACCATGGT  
 216551 GCTGTCTCTG TCGAACCTTT CTGTCCAGTT GTTCAGCAAT ATTCATGTAC  
 216601 TATGCGTCAG ATACTATTTG GAGATGTGGG GACACAGCAG GGAACAAAC  
 216651 AGAGCCCAGT CCCCATGGCA GGTACAGTCT TGTGGGAGAA ACAACAGTA  
 216701 AACAAAGAGT GAAGTCTATG TGATGGTGAC AAGTGCCATG GAGCAGAATA  
 216751 AAGCCAGGAG GGCAGTTAGC CAGAGCCTCT GATATGAGAA GTGACATTTG  
 216801 GGCAAAGGTC TGCAGCAGGC CGGGGGGTTA GGGAGTGAGG CATTTGAATA  
 216851 TCTGGGGGAA GAGTATCCCA GGCAGTGGCA ATACAAAGTT TGCAAAGATC  
 216901 CTAAGGTAGG AGCTTGCCCTA GCGTGTTTGG GGGCTCACAA GGGGGCCAGA  
 216951 GTTGTCTGGC CAGGTAAGT AAGCAGAGAG AACTGAGCA AGTCGGAGGG  
 217001 CTGATGGGGT TGATCTCCCC ATAGGGCTCT GTCGGCCATT GGAAGCCCAA  
 217051 GTTCTTTGCC ACTTGCTTAT ATTGCCCTTC TCATTACTCC GTGAGGCCCA  
 217101 CCCAAAAGTG GCCTTGATGA GGGGAGGGAG TGACATGGAG CCTCCTCCCC  
 217151 AGGCTTCTCC GCAGGAGGCT GTTTGAGGAA GGCCCTGTGT GGACAGGAGG  
 217201 GGTGCCGGTG GCTCAGGTGC TCAGATCCAT GTGAGTGGAC CCTATGCCCA  
 217251 ACACCTCGTA GGTTCAGAT GATCACCAGG AGCCAGATGT TTAATTACTG  
 217301 GAGCAAGAAG AAGTTGATTT GGGACTCCTT TAAGGTTCTC CCCTATCGTG

FIGURE 3, page 69 of 188

217351 CCTTCAATTA AGATCAAGGC CCCCCTGTAG CAGCCGCTAA ATGACACCAT  
 217401 GTATTGAATC TCTGTGCTCA AGCAGTTTGT CTAATTATCT GTGTGATAGA  
 217451 CTCAGCAGCT GTCAGACCAG CCACAACTCA AATACGTGGT CTCTGTACGC  
 217501 CTGCCTCAAA GTGTTTTATG CCCACTAGCA AGCTCAAGGA CAGGACTTAC  
 217551 ATGCTCTTTT CTAGATGTGG GATCCCTTTC AGGTTCTCT GCTGCCTAGT  
 217601 GATATAAGGC ATTGAAGGGG CCAGTGGCTG GGAGGACAGT GGGTACAAGA  
 217651 ATTGAGCAGA GGCCTGGGGG CTCGGCTGTT CCCTCCCTCG CCCAGCCCT  
 217701 TGTGCCTCGC ATGATCACTC AGCCTCTCTG CCTGCTTTTC TGGACAGGGA  
 217751 AGCAGTGACC CAGTTTGGGC CATCTTCTCC AAAGAGAGGG AGGAGCACTT  
 217801 GCCACTGTGT CAAGTTAACT GAAATAAATG AGGGGGATCA GGAGGCAGTG  
 217851 ACCCAGGGGA GAGTAAATGA CTGCTCATCT CCATCAGCAG AGAGTGTCTT  
 217901 CAGGAGTAAA CACTTCCCAG CAGAGCAGGC TCATTGGATG AAGGAGGAAC  
 217951 AAGACCACAC CAAACAACCTG AATGTAAGGT CTGTGGAGTT GAGTCCTCAG  
 218001 CCAGGAGAAC TGAGGGACAG AACTACAGAA AGCTGGGGCC CAGCCCTGTA  
 218051 CAGCATCCTG GGTCTCCGGG AACCACCCAT GCTTCCTGAT TGTAGGTGAG  
 218101 CTTGTGCCCA GTCTGCACC TGGGTGCCCTC ATGAGGGCCA GATCCAGAAC  
 218151 ACATGTATTC TCCAGGCTAA TGAGGGAAGA CAGAGCTTAA CAGTGACTAC  
 218201 TGAGTTTGGG CATCTCCTAG AGAGTTCTTC CCTCTGCTTT TCTTCTTGTT  
 218251 GTGCTCATTT CTGCTTTGAT GCATTTTGAT CACTTGTTAA TGAAAGTAAT  
 218301 CAGAGTGAAA ACTACTTTCA AAAAGCTCCT CTAAAGGAAA GTAGCAAAAT  
 218351 CACTTTGCTT GCAGGTAATT AAAATAGCCA GATGCAGTGA ACTCCGTCCA  
 218401 CTTATTATAA GCAGGGTGAT CTCAGTTGTG CACTTCTCTT TGTAGCTGGA  
 218451 AAAAAAGGCT CATCCAGGGA CTTAGCAGCC ATGTCTCTTT TCTTGTCTTC  
 218501 CTTAGGGAAC TTGTGCTTTC TCTTCCACTG CTTGTGTTCA GTGCACTCCA  
 218551 TGCCCCCTTC AGTTGGCTAA GGTATGCCCA AAGGCCTGGT CTACAGTGGT  
 218601 CCAGCAAATG CCTCTTTGAG CCTTTGCCTC CCTCACTCAT TCGGCCTGGC  
 218651 TAGCTCTCTG ACTTTTCCTC CAATACACCT GTACATCTCT GTCTCTTTCT  
 218701 GCCTTCCTCC ACCCCATCTT TGTCTCTGTT TCTCAGATGC TCATCCAGTG  
 218751 ATCCATATTT CCATCAAAAT ATAATAAACC CAAGGTATTT TTATAGGGAT  
 218801 TTTCAGAGAT CTTTACTTAT ATCCAGTCAG GTGGAGCTTG TACAGACCCA  
 218851 GGTCTGCATG AGTCCTCATA GCTGAGACTT TAGTCTTTTC CCCGTGCAAG  
 218901 CTTGTCCAAT GATTTGGGGA ACCCGAGATT AGAGACATCA GAGGATATGA  
 218951 AGGGCAGAAC CTTTCTGGAT AGGTGGGTGA TGGACAGGAA AGCAGGGGCG  
 219001 AGGAAGATGT CTCTTATAAA GCTACAAAAG AAGAAATACC CTAGACAAAG  
 219051 GAGGAGGTTT CAGAAGGGGA CACCAGGGTA GGGGCAGGGG TGTCAGAAAG  
 219101 GGTCCGGTGAC ACATCATCCT AATTCCGCAG AGAGTGAGCT TGCTTGTCTT  
 219151 CCTTCCCACC CACCTGCAGA ACTCCAGATT TTCAAGGGCG TCTCTCAACT  
 219201 GTTTAGCCAT GAATGCTGGT TACAGGGAAG TTAAGACCCC TCTCCAGATG  
 219251 CAATATGTCG TGGCAGTGAC CATGGGATTT AGCTGTAATT CCAGTCTGGT  
 219301 CAATCTCACT GGGCTGCAGT GAGAGTAAAC AGAGGTGAAG CCTGAACAGA  
 219351 CCTGTCTGAA CACGAATGAA AGGGAAGCTG GCTTCTGCAA CAGAGGAGGA  
 219401 GGAGAGCACA CACTTAAGAT GCAGCAAAAG AGCATGCTTT GGGGAAAAAT  
 219451 TATTACAGA AACAGAAGCT CATTTTAGAC AGCAACTGTG TTCTACTCCC  
 219501 AATGCAAGAA AACATGAAC CTGAAATGAG ATAAAAATG GGATTGTAAA  
 219551 TTGGCTGAGC CACAGTCAAA AATAAAATGG AAGCTGGGGG AGGTAAGGAA  
 219601 AGAATATAAA GAACCTGAAA TACAATTGCA GAAGTCCCTT CTCCACTTCA  
 219651 AGCAGTCAAA GGAAAGATTA ACCATACAGA AATCATAGTT GTTCCAATAC  
 219701 AGGGAACAAA CTTGAAAACC GTCCCCCAAA TACACCAAGA ATGAGAAGAA  
 219751 GATTTAAAAA ATACTGTGGG AGAGGATGAT AGTTATGTAA GACAGAGATA  
 219801 AAAGATTTAA AATAATAGTG ATTGGTTATC TTAAAGACCT CAGAGCAATT  
 219851 CAAATGGACA CAATAAGCAA AGAGAGATCC AAAAAAATAA GTGCCCTATA  
 219901 CTGAAAGATC TATCAAATAA GTCAAAATAT AATTGCTGAC ATTTTAGGTT  
 219951 TTGAAAAAAA AAATTAAGT GATCTGAAAT ATCCAGAGAG AGAAAAACAA  
 220001 AGCAGACAAA AAAAAAAAAA AGTCCTACCT GGTGTTGCAC TGGGGGCTCT  
 220051 TGAGTGGTTT CAGCTGACCG GCTTGCCCAG GGGCAGCTTC TCCCCTTCAG  
 220101 TTACATTTGT GTCAAAGGTG AGTCTCAGAC ACTGTCTGGT AGGAAGGAAA  
 220151 AAAACATTC TGTCTTGA CTTTCTGCG ATATTAAGAA GCAAGAAGGC  
 220201 AATGAAGAAC ATTGGTAGAA TTTTGGGGTG GTAAGACCAT GATGCAAGAA  
 220251 TTCTACACTT ATCAAATGGT GATCCATGTA TGGAAGAAT AAAAAGTATT  
 220301 TTCTGCTGGG CAAGGGTTCA AATAATACAC CATCCGTGTA CTCTTGGCTG  
 220351 GGAAAAAAG TGAAAGATGA ACCCTTCACA TTCTACAGAG AAATCAGAGA  
 220401 ATCTGACAAA GAGGAACCTCA AGGCTTAGGT GAGCACAGAG GCTCTTGAAA  
 220451 TGAGAAGGTG TCTAAATAAC TTTTCAAAT ATAGTTACCA AAAATTGCAA

220501 AGGGTAAATG ATGAGGTTAA GTGCGCTTAA TTTTCTTGAC TGACTIONATTG  
 220551 GAATTTCAAC AGATCCTGCA TAATCCTTGA CTCGGTATGT TAAAAAGCAT  
 220601 ACATGAGGGC AATATTCCAT CAGAGCCCAG AACAAACCTC ATGCAGCCCC  
 220651 AGACAAGTGT CCATGGCTGT TCCCAGGTGA CCTGGGAGAC TTCACCTCCT  
 220701 GCCTTCACTG GTGTATCCAG AGACCATGGG AAGGATCAGC CACTGACTGA  
 220751 CGTGTTCGAC CTACGGTCGG GCCTCCCCGT GCCTTCATCT CGGTGGCTAG  
 220801 AGTGTGCTCC CCAGAAAGCA TGCAGGGCTA CAACTGAAGT GGAAGAAAAC  
 220851 CGCAGCGGGT CATAGTGTGT CTTCTTGTG TGATGAAGCC TTTGTTTCATG  
 220901 GCGGTGTGTC AGTATGCCAG TGACATGGTC AGGACAATTG GGAAGGCCTG  
 220951 AACTATTGGT TCTAATGTTG CAGTCAATAC AATGTGATTA ACCAATTAGA  
 221001 GAGAAATGCA TAAGAGCCAA ATTCTGTTGC CAAGAAAAGG CAAAGAAGGT  
 221051 AGAAGAGCTG CCCTGTAAAG AGATAGAGGT AGAAGTTCAA CCCCCAAGGC  
 221101 AATAAAGGGC CACCATGGGA CACAGCCTTG CAGAAAAGAA GGAATGGCCA  
 221151 TCAGGGTGGG GTGGATAGGA TCATGGGAAA TACACATTCT CATTACCGGA  
 221201 GAATGTGCCA GGCTGCCAGC CCACCGCCAG GGGCTGTATG GACGTCTATCT  
 221251 CATGCACTCC TTTTCTTAGT TGGTGTTTAC TGAGAGGCAA AGAGAAGCCA  
 221301 GATAACTTTT CCAGTTACTG GACTTGTAAG TGACGGCACC AGTACTGGCA  
 221351 CCTGCCCATC CCCTTTCAGT GTGTGTCAGT GGCCACTCCC ATGATTAGGA  
 221401 GAGATATTTG TCAGGGAGTG GGGCTTGACC TGAACCTGGA AGAGTGGGTG  
 221451 GGTGGGACAT GAACAACCAG GTACAGGGCA GGGGCAGCAG CAGAGGGAAA  
 221501 GACTTCATGC AGCTTTGCTG ATGTTATGGC TGCATTCTCT CCTCTCCAC  
 221551 CAGACTTGGC ACTTGCAACT GATCAGACAG CAGGTACCTA AAAACTCTCA  
 221601 CTCCCCTAAA GGGAAATGAG GAGAAGTTAG AGTTACCGCA GACATCAAAT  
 221651 ATTGTATATC CAGTTGTTTT AATGAAATGA ATCACATTTA CACCCATCTT  
 221701 GTCTTTGAAC TTCAGTGGCT GTCTCCACGT GGCTATGTGA CGTGACAACC  
 221751 CCAGTGAGCA CATTACAAAG GAAGAAAGTC CCCGCCAATG CCACGTGAAA  
 221801 CACAGGGTGA GGGCTTCGTT GCACAGGAAG AAAAACGTCC ATATTTCTCG  
 221851 GTCACACCTT TCTGTCTCTC CACTTCTGCC TGGGTTCTCT CTCGCCAGTG  
 221901 TCCCCACCTC TGCCCCCTGC CAAATTTTCA TGACATGAAG ATCTCGTTTA  
 221951 TGTGCCAGGC TTGTCTCAAT AAACATTCTC CTAGCAATTT TAAAGGAACA  
 222001 AACTTTCCAT ATTAATAACT TTTGTGGTTC TCAGGGTAAA CAACTGTGGG  
 222051 TATCAGGAAG ACCTGAAGAA ATGGGGAATC TATACAAAAG GAAGGCAAAG  
 222101 TCCACTGCTG AGAAATGTGG TTTCTCTCTG TAAAACATGC TGACAGAAGC  
 222151 CCATATACTA ATTTAGAGAA ACAGTTGGCA CAAAACAAGA TGCACAGTTG  
 222201 AGCGTGCCCTG TCTAGAAGGC TGGGAAGGAA AGAACTTGAG TGAAGGCACC  
 222251 ACCAGGATTC CTGTGGCTAT AGCCCCACGG AGACTCTGCT GGCTGTGATT  
 222301 ATAATCATCA AGCTTTGCTG CAAATGATTG TGATTTTACA CATCCTACCC  
 222351 TTTTTAAAAA ACCAGAGATT GGATGAGAAT GGAGGGCAGG GTAACAATA  
 222401 ACTCAAAGAG CCCATGTGAC ATGCCAGGTC CAAGGCTGAG CATTCTGTGC  
 222451 ACTTTCTGTT CTTTAATTCT GTGACAGCCC TTCAGGGTAA GGACTGTTAT  
 222501 TACCCCTAAC TTGGCAGGTG AGGAACTGA GGCTCACAGA GGTTTAATGA  
 222551 CTTGCCCAAC ACCACTCAAC CGGTGAGGAG GAGAGCTGCA ATAAAGACTG  
 222601 ATTTGAAATG TTAATGTTG TCTTTGCTCT GTCTGCTCTG CCACATCTCT  
 222651 TACATGTATA ATTTAAAAA AAAACACACA CACATAGTGA TTATCATTCA  
 222701 GCAACTGGGC AGATTGTGCC TGCACCTCTA CTTGTGTTCT GAAGGCAACT  
 222751 TTCTGCACGT GTAGCTGACA TGTGCCCGTG TTGTTAGCCA CTCTTGACTC  
 222801 GACAAAGAAA TTGTGATGGT TTTTGAATAA CTTTGTCTCT TTGTGTTTTT  
 222851 TGTTCTTCTT ACTATGCCAC ACTGTCTATG TATATAATGA TTCCTGTAAT  
 222901 TAAAAAAGGA AGGAGGCCTT GCAGTGAGCA CCTGCGCAGT CTCTCCCTTT  
 222951 TTCAAATTA GCAAAAAGCC GGGGACTATG TATGGCTCAC CTCAGAGGAG  
 223001 CCAGTGGACA GGGTGGGCTC AGGACCGAGC TGCTAACTAG ATTTGCTGCC  
 223051 AGTGGACTCA GCCTCTGTGC AGCCCATGTT GGGTTCTAGG GGGACCAGGA  
 223101 GCCTGTGGGG CAGCCCAGGA TGGCAGTCTT GGAAAAGGAA TTCAGGGTGG  
 223151 GTGTGATCAG GGATAGAGCT TCTCTAGTGT ACATCACACA GGAACCCATG  
 223201 AGTGGTACCG GCATGTGCTC TAAACCTCAT CCTGCCTGTT TGTTCACT  
 223251 CCTGAGGATA GTAAAGTAGT GGTCCCTGTT TTCAACACTG CACCGATCAA  
 223301 GTTTCATTCT TGTGTTTAC GATTTCATAG AAAGATCTGT GATTCTTGCA  
 223351 TCTGGGCCAT TCATACCTTG GCAGGATTCT GCAATTCCGC ATTTCAATTG  
 223401 TTCAACAAAC AGTGCTGAGT GCCTGCTGTG TACCAGGCCT AGTCGAGGGC  
 223451 CCGGTGGCGG GGGTCCAAGA GGAGTGTGAG AGGGCCCTGC CCATGGGGAG  
 223501 CTGAGAGGGG ACACACACCC CCTGCCTATT GTAAACCAGG GTGGGGAGCG  
 223551 CGACAACGGA GCACGTCCAG TCTGTTATGG AAGGAACAGG GAGGCCTCCA  
 223601 AAAGGGGGTG CCATCTGGAC TGAGTACTAA ATGATGAGAA ATGGGTTAGA

FIGURE 3, page 71 of 188

223651 GAAAGAGGAG GGGAGTCTTC TAGGCCAAGG GTTAGGATAT GAAGCCAGCA  
223701 TGGGGAGCCA CAAGCCAATT GGTGTTTCTC CAAATATAGA GTTTAGGGCA  
223751 GAGAGAAAGC AGCAAGGCCA AGCCTGGAAA GGAGCTTTGG CCAAGCTGGG  
223801 GCCAGACCTG GACCATCAGG TTAAGGAGTG TGGACTTTCT CCTGGATGCA  
223851 AGGGGAGGCA GCATTCTAGG GTTTTAAACC TTAGGCCTGG TGTTTCAGAAA  
223901 GATCACCTGT GTTGCCCTTG GGACAGAGTG ACCCTGGAGG CAGGGGCCCCA  
223951 GCAGGAGGCA TCGAGGACAT TCAACAAAGC CACACAGAAG CCTGAATCGG  
224001 GGGAGTGGGC AGACCGGAGA ATCACTTAGG AAAAATACAG TCAGCAGGAC  
224051 CAGGCACTGA TTGTGAAAAT TAACCATCAC ACCTGCCCCAC CCCAGGATGG  
224101 TTCTAACTGC CTTCTCCCAT CCTTAGCCAG TCCTCGTCTA AGCAGAAGTA  
224151 CAAGTCATCT CAGCGAGGCC TGAGTGAAAT CCTTCAACTG ACAAGAGCCA  
224201 AGTTTCCCAT TTGGGCTGGG CCCTGAACAG TCCTGGGAAA GTGTCAGCCC  
224251 TTCGTCAGGG CGCACCTGT CACCACCCCG TCTGGAAAGC GGGCCACTGA  
224301 CTCAGAAAGG AAATGTGGCT TGGATGCCGA AGTCAGAGTG TGATTCTCCT  
224351 ACCCTGTGGC TCAGTCCCTG TCCTGGACTA TAGATGGATG GAGTGTGCA  
224401 CTTAGGGTC ATTGCACCTT CCTTCCCTGA GTTGCAACCT CCACCTCCAG  
224451 TACGCAGGGG TTCCGCAGGA GGGTGGGGAA GCAGCTTGAT TCCAGAAGTC  
224501 TTTACCTCTC CTCATCCACC AGCCTCAGAG GTGCTTTCTG CCAATCACAT  
224551 TTTTCCCAGC AGTCTTCTTT TCTTCCAAA GCTTAATAAT TTAAACAATA  
224601 TCCATTTGAA ATTATATTTA AACACTTAA CAATGTAAGA TGCAAACCTTA  
224651 AGGGGAGAAA GACCAAAGGG GAATTTAGGT GTCGGATTTC TCAGAACAAA  
224701 AGAACAGTCC ACAATTGGAG GGAGAGGAGT GGCAGAGCAC AGAGGCTGCT  
224751 GATTAGATCC AAGTGTGCCT CTTTCTAAG GATACTTTTG TCTGAGAAAT  
224801 GCACGCCTCG ACCAGCAAGC TGCTGAGTTC AAAGACATGG GAATCTGGGT  
224851 ATTTAATCAA CCGCCTTGGT GACTGGAGCA TGGGGGAGCC TAGTTACTCC  
224901 TGGAAATCGG TAATGAAGGC TGCGGCAGGA GACCCGCCTC TTAATAAGGC  
224951 AGCAGCCAAT TAACAGAGCA AATGTTTGGT GTGTCCCCGC CGAGTGATGG  
225001 GATGTCTTGT CTTCTCCAG GGCCTGGGG CCTGTCTAGT AGACAGGCAG  
225051 GTACATGACT TAAGTTAATT GGAGAAAAAC TCCTTCCAGG GAAGTGGGCA  
225101 CTGGTTTGTG ATTCAATGGG ATGGAGATCT GGTTTTGACA AGTACCTTTG  
225151 CCTGACCCAG GAAAGGACAC GTCCTTCAGA AAGGCTCTCC TCTCCCCCGA  
225201 CCCTAGCACC ACCACTGAGA CTCTCTGGTT GGGAGTTTCT AGCCCCAGGA  
225251 ATCTCAAAGC CAAAGAGCAC AGCTGCGCAT CTGAGAACCA AGAGAATTTT  
225301 GGCAGGAGAA GGCGAACCTC CTTCTGAGA GAGTGGCTCT CCCCACCCCT  
225351 TCAGATGGTA CCTGGGAAGC ACCTGCTGAG CCCACCAGGG TCTGGGCTCT  
225401 GGAATGGCCA GGAGGAAGTG CAGGATGTGG GCCACAGGAA GAGCTGTGAC  
225451 TGGGAGACAT TTGAAACTCA GGGTAGGACA AAATCAGGGT GGGCCGGGCT  
225501 TGGCCAGCTG GGGAGTAGCT GGTCATGCCA ATGGAGAGGT CATTTCAAAA  
225551 TGGGCCAAGG AGTAACATGT CAGTAAAGTC CATGTGGGCA CGCAGAGCCT  
225601 GCTCCAGCCA CCTGAATATC CACCAGGCAG TTGCACGCTC TGTTCTCCT  
225651 TCCCCACCC CCCTTCTCTC TCTCTCCCTG TCTCTCTCTG TGCCCTCTTT  
225701 CTTTCCCTGT ACTCTCTCTC ATCTTCTCAC CTCCTATTTC ATTTTCCCTT  
225751 TCCGTGCCCT CCCTGTGAGG TCTGACTTGA GTGTGCCTAC ACATATCTAA  
225801 AACAAGTGAC TGAAATAATG TGTTTCTCAG TTAAGTGGGA GTATGTATTA  
225851 CATGGTGCAA GCTACTAGTT CTATGTTGAG GGAATTAAGC AGTTTCCCTA  
225901 GCAGAGTTGA GACAGTCTGA AATAGATGAT CACCATGCT CCCCAGCATC  
225951 AGGGGATGAA CCATGCCATC TGACCGTTCA TGGTCTGTG AATGCTGTCA  
226001 ACCCCACATG AGCCAGCAAG TTTGTCTTTT ATTGGAGAAA TCCCTCTCTC  
226051 CAATTTTCCA AACAATCACA GTCTGGATTA TAAGTAAATG ACTAATTCAA  
226101 CAAATGAGTT ATTGCTCAGT ATTCTTGCAT CCAGTTTAAA GTGAGAGGAG  
226151 GAGGAGGAGG AGGGAATGAT GAGAACTAAC AATCATCACA AGTAGGTGGA  
226201 AATTATTACC CACGTAAGA AATGGAGGTT TCAGAGGAGT GTTAGGTTAT  
226251 GCCACAGTAA CAAACAACTG CAAAACCTCG GCACCCAGT AAAAGTTTCT  
226301 CACTCACGCA GTACATCCAG CATGGGTCCG CAGGGGCTCA GCTCACAGAC  
226351 CCAGGCCAC ATGGCCTTCT GCAGTCAGTG ATGTAGGGAA GGCCAGGCAT  
226401 CTGAGAACCA GGAGGATTTT GGCAGGAGGG TTTGGCAGGA GAGGCTGAGC  
226451 AAACCTCTC CGTGAGAGGG TGTCTCTCCC CACCTCTTCA GGGGGTATCT  
226501 GGGCAGACCC TGCTGAGCCC ACCATGGTCT GGGCTCTGAG ATGACCAGGA  
226551 GGAAGTGACG GAGGGGGAAG GGATGTGAA GAGGGAGTAA AACCCCAAGG  
226601 TAGAGCCTGG AATTGACACA CATTCACTTA AACCCCATTT TCCTTGAAA  
226651 AGTAAGTCAC ACAGCCACAG CTAAGTTGGC TAACTTTCTC CTTGGAGGAC  
226701 AGAGGCCCTG CTTCTCATG TTCTCTCTCA GTCCACGGCA TCCCGGCCAG  
226751 CGTGTTTAAAC TAGAGTGAGG GCTGAGTGCT CATAGGAACG CTTGAACACA

FIGURE 3, page 72 of 188



226801 CAACCCTGCA CATAGCTGTG TCCACGTGCA AGGCTGACCT ACTGGCATAT  
 226851 TCATAGAATT GGAAGGGAAA CCACTTGGTG AAAAGGAAAT GTTTTCTTTC  
 226901 ATTTTCTATT ATGACGTATG GCATACAGAC AGTGGGATGA AAATGTGTAC  
 226951 ATGCAGTTGA AAGAATGATC GTGAAGACAA GAGCCGTGTT TTAGGAATTA  
 227001 GGCTGTGCTT TAGAAATGCT CCCTCTCTCG TGCCCTCCC TACTCAACGT  
 227051 CCTCCTCCCT GCCTGGAGGT GACCACTGTC CGTCTGTGA TAATCATCTT  
 227101 CCAGCTTTCT TTATAGTTAT CTAAATTTAT ATTCATAAAT GTGTCTCAAC  
 227151 ATGGTTTACT TTCTCTTGTT TTTGAACTCC ATATAAATGG AACCATGCTG  
 227201 CGGGTGTCTT TTTGAGATT ATTTCTTACA CTCAGTATCT GATTGTAAAG  
 227251 ACTAGTTCAT ATGGGGTATA GTCATACCTT GTTCTTTTCA TTCCTGGATA  
 227301 TCCCCTTGTA TAACTATGCC ACGATGTATC CATTCTGCTG TTGACAGCCA  
 227351 GCATTGGGT TAATGCCCAT TTGGAGATAT TCCAAGCTGT GCAACTGGAA  
 227401 TCATTCTTGG ATATGTCTTC CTGTGCACCT GTGAAAGTGT TCCTCTAGCG  
 227451 TGTACTCTAG GCACTGTACT TCACTCTCCT TTCTAGATAT CACCATACTC  
 227501 TTTCCCAAAA TTGTTGACCA GCTTTCCTTG GAAACAACAG TGTGTGAGTT  
 227551 CCCATAATTC ATATTCTTAC TAACACTTGT GACTATAAAA CCCCTTTTGG  
 227601 ACAAATGCT TTTTCTGCAA CTACTGAGGG TTTTGCCCTT TTTCCTATTG  
 227651 TTTATTACGG TAATTGATT TCATATGTTA AACCAATCTT ACATTCTCGG  
 227701 GATAAATCCC ACTTGGTAAT GATGTATAAT CCTTTTTATA CCCTGGATTT  
 227751 GATATTAGGT ATAAATTTAT TTTATAAGTT ATATATATAT ATATGATATA  
 227801 TATTTTATAT ATTGCTGGAT ATGGTTTGCT AGTATTTTGT TGAGGATTTT  
 227851 TTTATATCTA TAATCATAAC GGATATTGGT CAGTAGTTTT CTGTGTGTGT  
 227901 CTGCTGCTGG TTTGATATAA GGTGATATT GAAGTCACAG AATGTGTTGG  
 227951 AACATCTTCC CTCTCTTTT ATTTTGTGGA AGAGTTTATG AAGAATTGTT  
 228001 ATTAATCTT ATTTAAATGT TTGATAGAAT TTACCAGTGA ATTAATTGCG  
 228051 TCCTTGCTT TCTTTGTGT GAAATTTTAA AATAACTAAA TCTCTTTACT  
 228101 TATATAGTTT TCTTATTTCT TCTTGAGTTA CTTTCAATAG TCTGTGTCTT  
 228151 TCTACAAATT TGTCCAATTC ATCAAAGTTG TCTAATTTAT TGGCATATAC  
 228201 TTGTTTCATA TCTTCCCTTA TAATCCCTTT TATTTTGTA AGTCAGTAGT  
 228251 AATATCATCC TCTTACTAT TTTTAGTAAT TCGAGACTTC TAAAAAATTT  
 228301 TTTTGTTAGT CTAGCTAAAG GTTTTGTCAA TTTTGTGAT TTTTTTTTTT  
 228351 GAAAGAACCA ATTTTGGGT TTGTTGAGTT ACTCTATTGC TTTTCTATTC  
 228401 TCTTTTCATT AATTTCCAGT TTAATCTTTA CTACTTGCTT GCCCTGCTTG  
 228451 TTTTGGGTTT AGTTTGCTCT TCTTTTACT ATGTGTTATG GTGAAAGATT  
 228501 AGGTTATTGA TTTGAAATTT GTTTTATTTT ATTTTATTTT TTTTGTGAGA  
 228551 TAGAGTCTCA CTCTGCACC AGGCTGGAGT GCAGTGGCTC ACTGCAACCT  
 228601 CTGTCTCTCA GGTTACGCC ATTCTCCTGC CTCAGCCTCC CGAGTAGCTG  
 228651 AGACTACAGG CGCAAGCCAC CACACCCAGC TAATTTTGT ATATTTAGTA  
 228701 GAGATGAGGT TTCACCATGT TGGCCAGGAT GGTCTCGATC TCTTGACCTT  
 228751 GTGATCCGCC TGCCTCAGCC TCCCAAATG CTGAGATTAC AGGCATGAGC  
 228801 CACTGTGCTT GGCCTGTTT TTTTAAATG TAAGCATTAA TAGCTACAAG  
 228851 TTTCTCTCTA AGCACTCCTT TACTACATCT CATAAGTTT GTTACGTTGT  
 228901 GTCCTTATTT TCATTCTAT CAAAGTGTAT TTTCTCTTGT AATTCTTAT  
 228951 TTGACCCATT GGTTATGTAG GTGTGTGTTG TTTAATTTCC ACATATCTGT  
 229001 GAATTTCCCA GATTTTCATT GGATACTGGT TTTAATTTCA GTCTGTGGT  
 229051 AGATGAACAT ATTTTGTGTG ACTTCAGTTC TTTTAAATTT ATTGAACCTT  
 229101 CTATTCTGGT CTAGTATATG GTCTGCTCTG GAAAATGTTT TATGTACACT  
 229151 TGAGAAAAAT GTGCATTCTG CTTTGTGTTA ATAGGGTGTT CCAGCGGGAT  
 229201 CTAGTAGGTT TAGTTGTATC ATAGTTTGT CAGTCTTTT TTTTCTGTT  
 229251 GATCTTCTTA GTTGTCTAT TCATTATTAA AAGTGAGATA TTAAAGCCTC  
 229301 CATCTATTAT TGTCTCTAT TTCTTTCTTT AGTCTGTCTG CTTTGTCTTC  
 229351 GTGTATTTTG GGGTTTCTTG TTAGATGTGT ATATGTCTAA AACTATTAAA  
 229401 TCTTTCAAAT TGATTAGCCC TTTTATTATT ATCTGTTTAT ATAACACCTG  
 229451 GTTATCTCCA GTAGCATTGT TTTATATTAA AGTTAATTTT GTCTGATATT  
 229501 AGTATAACTT TTTGAGCTTT CTTATAGTTT CTTTTCCTAT GCTTTTACTT  
 229551 GCAATCTATT TATATCTTTA ATTCTAAAGT ATGTGTTCTA CAGCCAGCAT  
 229601 ATATTTGAAT ATTACTTTT TATCCAGTCT GAAAATCTCT GCCTTTTGAT  
 229651 TGGATTGCTT AATTCATTAG CATTTAATAT GTTTATTGAT ATAGTTGGAT  
 229701 TTATATTTGA AATTTTACTT TGCTTCTTAT ATGTCTCATT TCATTTATTC  
 229751 CTCTGTTTCT CCCTCAGTGC TTTGTTTTGT ATTAAGTGA CATTTTCTGT  
 229801 TGTAGCATTT TAAGTCATTT AATGATACTT TTCCTACATT TTTGGAGGGT  
 229851 GTTTTGTAGT ATTTTCTGG GGTTTACCAT ATACATCATA ACTTATCAGA  
 229901 ATTTACTTCA AATTCATACT AAAACTTTTA ATTTCTGTGA GATATAGAAA

229951 TGTATTTCCT ATATGTATTT TACACTTTAC ATTTTCTGCT TATTACTGTT  
 230001 ACACAAAATA AAACATATATA TGTACAAAC CCAATAATAC ATGTTTTAAA  
 230051 TTTACTGATT TAAATAATTT TGTCATTTGA AGCTGAGGGA ATAAATGAGA  
 230101 GCAAGTATAT AGTTATATAA TTTGTATGTT AACCTTCTTA TTTACCATTG  
 230151 CTGGTTTTCT TCAGTGTGTT TGTAGATTCA AGTTATCATT TGATATCATT  
 230201 TCCTTACTCC AATACAGTTT TGCACCCACC TACATCCTTT GTGCTATTAT  
 230251 TTTCAAGTAT GTTATATTTT TGTATGTTAT AGGCACAATT GTACAGTTAT  
 230301 AAACATATTA TTTTATACAA TTGCTTTTAA AATCAGCTAA CAAGAAAGGA  
 230351 GAATAAAATG ATATTATATC TGCTGCTAT AATTACATAG TTATCTTTGC  
 230401 CAGTGCTCTT TTTTTTGGT GTAGATGTGA TTACCATCTG GGGTCACTTG  
 230451 CTTTCAGCCT AAAAAGCTTC TTTCACCTTT TGTAGAGTGA GTATGTAGCA  
 230501 ATGAATTATC TGTTTTTGTT TATCTGAGAA TGTCCTTATT TTGCCTTCGT  
 230551 TTTTGAAAAG TGGTTTTGTT GGATATACGA TTCTTTGTTT ACAGTTTTGT  
 230601 TTTTTCAGAC ATTGAATATG TCATTCCACT GTCTGCTGGC TTCTTTAGCT  
 230651 TCTGACAAAA AGTCAGCTGT TAATCATATT GAAGTTCCTT TGTACACGAG  
 230701 TAAAAAATAA AATTGTTGCT GCTTCAAAT TTTTCTCTTT GTCTTTGTTT  
 230751 TCTATATTTT TAGTAGAGTG CACCTGGATC TCTGTGTATA TCTTCCTTGA  
 230801 AGATTGTTGA ATTTCTTGGA TGTACTGATT AATTTTTTAA TCAAATTTAG  
 230851 GAAGTTTTTA GCCATTAATC CTTCAAATAA TTTTCTGTTC CTTTCTCTTT  
 230901 TCTTTTTCTG GTGCTTCTAC TGCACATATG GTGGTGTGCT TAATGGTGTG  
 230951 ACACATTTCT CTGAGGCTTT GTTCATTTTT TTTTTTGGT TCATTTTCTT  
 231001 CCCTAGTAAA CTAGCTGTCC TACAGTCTAG CTTGTTGCTC TCATGGAGCT  
 231051 ACCAGCCTCC TCTTAATTAC TTACCACCAA AATGTTTATT GTTTTAAAGAG  
 231101 TACTTTTAGG CTCAAACCTC CTCATACTCT GTTCCAAATT CCTCTCAGTC  
 231151 AGAGCTCTCC ATTTTAAATG CCTGTCTCGC CCCATGGCCA AAATCTCCAA  
 231201 GCCACTGCTC CAGAGTTTGG TGTGGGCATA ATGGCCAGT TCTCTTAGAA  
 231251 TGACAACCTT AGTTGTAATT CTAGCCTGGT TGTCTATGTA GACTCTGGTC  
 231301 TCTCAGTTCA CTTCTCCCAG CATGAAATCT CTGTCTATG AGTAAACTGG  
 231351 GGTGAGGGA CTTGCGGTCC CAGTGTTACT GCCCTGTAC ACCAGCAGTA  
 231401 GAGTCTCCAT CTTATGAGTC AGAGCTGAGT GGAAGATGAG AGCCCCAGAC  
 231451 TGCTCAGTTG CATTGCGCTG GAATTTAGTC TCCACAGCCT GGAGCTGGCA  
 231501 GGGATTCGTT GTGCTGGCAT CCTGACCTCC CAGGGAAATA TTATATAACT  
 231551 TGACTGGAAG CTGGGGAAGA GGGAAACCTG TCTCCTTGGC ACTTCCATCC  
 231601 AGAATGAAGC TTCCCTCACA TTTAGCTGGC AAAGAGAGAG GGAGCAAGCA  
 231651 GATCATGGCT CAAGTAAGAC TCTTGCTGTT TTTACTGAAT TTAGTAGATT  
 231701 TTCTTTTTTT TTTTTTTTGA GACAGACTCT TGCTCTGTCT CTCAGGCTGG  
 231751 AGTGCAATGG CACAATCTCG GCTCACTGCA ACCTCCGCCT CCTAGTTTCA  
 231801 AGCTATTCTC ATGTCTCAGC CTCCCAAGTA GCTGGGATTA TAGGTGCCCA  
 231851 CCACCACACC TGGCTAATTT TTGTATTTTT AGTAGAGACG GAGTTTCACC  
 231901 ATGTTGGTCA GGTGGTCTC AAACCTCTGA CCTCAGGTGA TCCACCCACC  
 231951 TTGGCCTCCC AAAAGTAGAT TTTCTTGAAT AAATGTTTCT TCATGTGCTA  
 232001 TAGGTAATTA GGAAATTTT CAGATACTTT AACCGGTTGG GTTTGGAGTG  
 232051 TGTGTGTTTT TTTTTAAATC AAAATCATCA TTTCACCATT TATATTTATT  
 232101 TCTCTGAAGA GCATGTCTAC AGAGTTTCGTT ATGCCATAAT TCTAAAAGCG  
 232151 GGACCCAATG TTTATTTTTT TAGTCTACCT GGATTTAATG TGTGTTGAAT  
 232201 GGTATAATGC AAAGGCCTAG TTTTATTATT TTTCACATGA ATTCCAATTC  
 232251 CAATTTGCCC TAACTCCATT TATTGAAAAG TCTATCTGTT CCCCAGAGA  
 232301 TCTACAATAC TGCCTCTGTC TTGTAGCAA TGTCTGTTT TGCAGGAGCA  
 232351 TATTGCAGAG TTCTTTCTTC TGTTTCAGTT ATCTATTCTT GCACCAATAC  
 232401 CACAATGTCT TAATTATAAA AGCTTTATAT AGTAAGTTCT GATATCTCAT  
 232451 AGGACAAGCC CTTGCTCTTC TTCTTTGAGA GCACTGAAGC TGTCTTCAGG  
 232501 ACTTTGTATA TGTTTATAAA TTGTAGATT CAGCTTGTCAG GTGCACACGT  
 232551 GTGTATACAC ACAACCTGTT GGAAATTTGA TTTGTATCGC ATTGAGTCTA  
 232601 TGGGTAAATT CAGGAAGAAT CAACATCTTT ACAAGACTGT GGCTTTCCAT  
 232651 CCGTAAACAT AGTATATCTC TCCATTACTT AAGTATAAAT ATCAACTGAT  
 232701 GCAAGCAGTA TGTGTGCTCT CTAAGGCCAT GGATCTTCCA GAACTTGTA  
 232751 ATATTTTCTA CTCTCTCCAC TCATCTCACA AGGGTTCATA TCACTTTAAA  
 232801 TCATGTCAAT GTGGGAAGAA CAAATTAAC TTAGAGGCTA TTACTGATCC  
 232851 CAATGTGACA GAAAGCCAGA TTTCTAGACA AGTAGATATT TTTGGTAGTT  
 232901 GCCTCTAATG GATCAACTAT ACCCAACGGG AGTGAGAGTA GAATAAGGTA  
 232951 CATTTTTATC ACAAAGTAGC ACCTACTTTA AAGCTCTCC ACTGCTTTTT  
 233001 ACTAACAGT TTATTTCTT TCATGCTTTC ACCAACACTC CAGCTGTTTT  
 233051 CTGACAATGG GGAAGTAGCA TGAGGCTTGG CTATTTCAAT CAAGGCAGGA

FIGURE 3, page 74 of 188

233101 AAATATTGAT TAGGGGTCTT TAAAAGTAAC TGCTGGTGCT TTCCTTTTAT  
 233151 TGTGTTTTT CTGATTACAA AGGTATTATG TATTATTTCC AGAGAATTTA  
 233201 GGACATACAG AAAAGCACAA AAGAGAAAAA TAAAAGTGAT TTACCATCAG  
 233251 AGAGAACCCAG GGATAATATT TTGGTATGTA ACTTTAGAGT CTTTATATATA  
 233301 TATATATATA TATATGCCAT GCACACCCTA TGTTTTGGGT TTTTTTCAA  
 233351 AATAGCTCTT TATAAATGGA TCTCTTTATA CAACAGTAAG TCAAACCATT  
 233401 GTTTTCTTTG GAAAAACAGCA GGTAAATGGG GCTCAAGAGT GCTGCAGGGA  
 233451 AAAGTGCAGA GAATCCCTTC AGGAGAGACA GAGGTGTTTA AGTTGAGACT  
 233501 GCCAACCCAGG TTATGCACCA GCTCACTCCT CGAATACCAC CTAAGTATT  
 233551 CTAGATGGCT GACGTGAATT TGATTGCCTC TCAAGGTTCC ATCCAACCTCT  
 233601 AAAGTTTTGG GACTCCAAGA TTTCTGTCTG ATCTGTGGTC CCATGTCACC  
 233651 TAACACTGTC ATAGGCCTGA GTTGTGAAA TGAGGGGTGC TTAGTCAGTC  
 233701 TGGTGCTATA ACGGATTATC ATAGTCTAAG TGGCTTAAAG AAATTTATTT  
 233751 CTCACAGTTC TGGGGGCTGG GAAGTCCAAG ATCAAGGTGG TAGCAGAACT  
 233801 GTGCTCTGGT AGGGTCTCTT TCCTGGTTTG CAGATGACCA TCTTCTTGCT  
 233851 GTGACCTCAC ATGGTAGAGA GAGAGAGAGA GAGATCATCT CTTCTGTCT  
 233901 TTTTTTTAAA AGGTATTTAA TCCCATTCTT GAGGACTCCA TCCTTGTGAA  
 233951 CTAATTACCT AACAGACACC TCACCTCCAA GTATCATCAC ATTGGAGATT  
 234001 TATGCTTCAG CATATGAATT TGGGGAGACA CAAACATTCA GTGCATAGTT  
 234051 AGGGGTTTTT GGTGTTGCTT TTTAACTGCC CCACCAAGAA TATGATTGGA  
 234101 AAGTTCATAT TTAACCAAGA TGGTAGTACT GTCACAATTT CTTTCTAGAA  
 234151 GAGATAATAT TAAAAGACCA TTTCATCTGC ACAGCTCAAT TCCACAGAGA  
 234201 AGAGATGGTG AACTCAGGCT TGTCTCTGGT AAAATCACTG TGTGCCCTGG  
 234251 GCCCAGAACCC CTTGTGTGGA CCCCTTTCCCT CCCTTCAGCT CCACCAAGTAC  
 234301 AATGGACCCT TGTCCAGAAA GGGACTTCTC GTGAATAAAT TTGCCTCCAT  
 234351 AATGACCGAA TAGGAGAAAG TTGCACATCT AACCACCTGT AATTATCAAA  
 234401 TAAAATCCTT TGTGCCCAGG TCAGTAAGTC TGAGTGTGGG CAGTTGGAGG  
 234451 AGGATAGGGA AGCCAGGGGA GGGGGCAGGA GGACCTTCCC AGATCCTGTG  
 234501 AAATCACCTT TCTAAGTTAC CACTCAGGAC ATGGCTAGCT AGATTAATGT  
 234551 GGGGCTCAGG GTTTCCTGCG CCAAGGACT TCATTTTCAGG TCAGGCAGAG  
 234601 GCAAGCAGCT TAGCCCTCAC ATCTGTGCTG CTGAGTGTGG TTAGTGCAGG  
 234651 AGAGAGCTGG AGTCTAAGGG AAGAACTTC CCATGCTTCC TGAGGGGTGG  
 234701 GGATAACTCT GAAGCTCTGT GACCAGTTCT ATTTAAGCCA ACATAGAGAA  
 234751 GGGCATCATG CTGCTGAAGG TAGAGGCAAG TGATGCTTCA TCCTGAGATT  
 234801 TTGGGGACCA TTGCTGCTCA GGTGCTTGTG CTGTTCAACC ATCTTAGTGC  
 234851 CCCACCCAGG GAGATGGAGG GTGCACTGTG GCCCCAACCC AGTCTACATG  
 234901 GACTAGTTTA TGATCAAGGC TTCCCAAGAA GGGAGGGTAG GTTTGGTGGG  
 234951 GTCTGCCCCA AACAGTTGTT CAGTGTGGGG CCAGCATCCC ACACACCCAA  
 235001 CCTGGTGTGA AGTTATGGAT CAGCTTGGCC ATGAAGCAGT ATATTCCAGC  
 235051 TCACTCATTT TCACATTGGT GCTGCCGCCT GTTCACACTG GTTCCTTCTT  
 235101 GTATGTGCAT CCAGTGGATC TCTGCTTCTA CATATAGCTC ATTGTGCAAC  
 235151 CCTCCCACAT GGTGGTGTGA CTCATGGATT TCACATTCTT ACTCTCAGGA  
 235201 TGTGTTTCAA GGAAGTTACC CTCGGAAAAA ACTCTTCCA TCCCTATAAT  
 235251 TCCCACAGTC CAAGATTCAA GGTGCTGACC GCCCACCTAC CTGCATCACC  
 235301 CCAAAGGCA GTGGGCTGGT GGTGTCATGT CAGCTCTTGT TGGCTGCAGA  
 235351 GCCCTGGGGG CTCTTCGTAA TAGCCGCAGG CTTCTCTGGC AGGGATTAGA  
 235401 ATAGTCCATT TGGGCTTCCT TAACAGAATA GCACCAAATA GGTGATTTAG  
 235451 ACAACTATGA AAATTTTATT CCACCTTTTT GGGGTGGCTT CTTAGCCACC  
 235501 TTTTGTGTC ATGCTCACAT GGCAGAGAGA GATCCTCTCT CATGTCTCTT  
 235551 CTGAGAAAGG CACTAATCCC ATTCATGAGG CTCCCCCAC CTCTAATAC  
 235601 CTTACAGTTG GGGATTTAGG CTTTAATGTA TGAATTCTGG GGAGACACAT  
 235651 TCGGTCCATA GCAGCCAGCC ATGATGTTCT CACAGGTGGG AGCTGCTGAG  
 235701 AAAGCAGCTG TGACAAAGAA CATGAAGAAG CCTGTTACAA GGAGTACCCC  
 235751 TCCCTCTGGG CACAATTAAA GCAGAGTGCC CGGCCTGTAT ATGCCAGAAA  
 235801 TTTCAGTTCC TCCCCTGCTG AGGCTCAGTT CGCACCATAA AATGCCACAT  
 235851 TTGATATGCA GATTCCCTGA ACTCTCCAGA GAGGAGTCTG CTACCCAAGG  
 235901 GGAACAAAG GCTGTTTCAA ATGTGTCTGG ATCCATTCCC CCATAAGTGA  
 235951 TGTTAACACT AAAACACAAC AGCTCTCTTT CATCGGGCTG GTTTTATGGC  
 236001 TCCCACTCCA AGTGTGCTT GGAATTGTGG TTGCTCTCAT TGGCTTTTTA  
 236051 CTACCTTTAA AAGTTCCTTT GCAGAAGCCT GTTGCTGGC TTCCTGCTGA  
 236101 CTCCAGGGCT TGTTGTGGAA AGGCCTGGAA GGTGGCGAC TAGGAGCCTT  
 236151 GGGCCATGAC CCAGTCCTAA TACCAAGGTA AACACTGAGC TCAGTTATGT  
 236201 GTTCTCTCCT TGGTGTACAG TGCTTAGGGG GATTCTGACA CACAGGTGAC

236251 CTCCAGGGGG CAAAGACTAG GATCACACAC AGTCTAAAAA CTTTATTCCA  
 236301 CAGGACAATA AATTTTAAAA AATAGATAGA TAGATAGATA GATAGATACA  
 236351 TACATACATA CATACATAGA CATAGATACA TAGATAGATA  
 236401 ATTCCCTGCG CAGTCCTCAA ATCTCAGCAT GAAGCATTAT CTCCCTGGCG  
 236451 GGAGAAACAT GAAAACGTGC TCCAAAGCTG ATGGCCCTTT ACCTGGAAGT  
 236501 TTGATGAGGT GTGTTTGGCA GCCCCAGCAG GCAGATGTTT GGCCTGTGGG  
 236551 TGGGTGACAG GGAGGCCAAT TTCAAATGCC CTGCTTGTC A GTGTCATGGA  
 236601 TTTCAATTCC TCTCTCTGG AAGCAGTTTC CACCATAAAA TGGTGAGCCT  
 236651 TCCAACAGCT GGGGCTGCCT TTGCAATGGG CCTCCCGGTG ATGAAGTGGG  
 236701 CTTCCCGTCC GTGGGAGTGG ACAAGCAGCA GCCGAGGCTG TTGGGGAAGA  
 236751 GGGCGGAGAA TTTCTGCCCC GGGAGCGACG TCTGACGATG AGGAGTCCTT  
 236801 CCAGCTCTAA CAGACAGTGT TCATACCTCA GTGTTTTTCA AGCCCCAAAT  
 236851 CAGTTTCTTT AATGATGCTC CTGTAACAAA CAATGCCCAG TGATCGCTGA  
 236901 AACCATCTTT TTTCACACTT CAAAAGAATC TGAGAACAAA GGTGAAAATG  
 236951 ACATTTCTCT GTCTGCCAAC TGATATTTAC GCACATGAAT CATCTGACAC  
 237001 ATTCCGCATT ACTTTACAGG CACTTCAAAT GGAGGCTTTT CCCCTGGGAG  
 237051 CTTCTGTGTT GTGCCAGACA AGTGGAGGCC CTGTAGGGAC ACTCAGCGGC  
 237101 TCTCACACCC TAGACAGGTC CGTCTGCCA CCAGGAGTCA GGGCCACACT  
 237151 TTCCGTAGAC CCTCTTCCCT CATGCTTGCT TTTTCCCATC CTGGGAGTTT  
 237201 TAGGGACACT AGCCATGATT TTAAATTTCA CGAGACCTAC ATGGGATAAA  
 237251 CCCTCAAGAG TAGATATGTT AAATGTCAGG AATGCCTCTT GCGGTGAGGG  
 237301 CCTTGGGAAA GCAGTGCTGG CTCTGGGCA GCCCCAAAAC ATGGGCAGAG  
 237351 CTTACGTGTT CAGAGTCTCG GAGTGGACAC CCTTTGTAGG TTGTGTGGCT  
 237401 CATCCCATTA AGTCCCAGAG CTGGCCGGTC TTGATGGCCT GGGGTTGGTG  
 237451 ACCCTCTGAG TCCTCGGGAC CGTTGGCCCT CTGTGCGCTG TCCCTCCATG  
 237501 CCCCATCCCT GCATGGGCCC TGCTTGCCAG CATTGCCCAG AACTACCCAG  
 237551 GCATTCAGAG AACCAAGGCTG GTACTGGCCA GGGAGGCAGC CAGGGCCTCT  
 237601 GTCATCACAG GCCTGATGTC CAAGCTCACG TCTGTGCTGG GAACCCAGTT  
 237651 TGCAGCCAGT CATTGGCAGG GAGAGCCATC TCTTACCCTG GGTTGACTCA  
 237701 GCACCCAGC ACCCACTCGA TGACCCCAAC CTGCCTTTCC CTGTTGCTCC  
 237751 ATGGGGCCAG TTGCCCTAGA CCCTAATGGG TCTTTGAACT CTGGCTTTCT  
 237801 TTCCTTCTTC TCATTCTCTA AACCACCCCC TCTGCTCTGA GGGCGAGGCT  
 237851 GCCTGAGCCT CTGACTCACT GCTGCCTCAC ACCTGCCTAC CCCTTCTCCC  
 237901 CACTTCCAC AGCACCGCCT CATCCCTCAT TCCTTCTCTC CAGCTGGCGG  
 237951 GACAGGAGTC CAAACCCCAA GACTGCCCAA AGACCATGCT TCAGGACCCA  
 238001 TGCTGCCCTT CCCCGAGCCT GTCCTCACAC AACTCTGCCT AGGAAGCCAG  
 238051 ACCACACAGG ACCCTGAGCA CGCTGGCTTG CCTGGGAGAA CTA CTGTCTCT  
 238101 GTTTCCTTC AGGCCTGGGA CCCCTGTCTT ACTTTGGGTA TCCTCCAGCA  
 238151 GGCTTCTGCG CCAGCCATGG CTAATGTTTA AAAAAAAAT TAGGACTCTC  
 238201 CCACAGGGAG AGGCTCCTTA AATAGGATCC AGATGCTTCA CTTTTAGAGA  
 238251 GGCTGGCCTG CAGGCAGATA CCAAGTGAGG GGCCATCTCA GTCTCAGCCT  
 238301 GTCTCCCTGC CCACAGCCCA GCCTGCCAAC CACAGCTGCC ATATTCCAAG  
 238351 CGACCTTGTG ATTTCTCAG CGACAAGCAG AGAACTCTGG GCAGAAATCA  
 238401 TGTTCTCTCT CTGCCCTGGA GAACTCTGGG TCTCATCAGG GCAGACAGAA  
 238451 AATATTAGGG CATGATTGAA GATGAAGGTT GTGGGGCTAT GACCACATGC  
 238501 ACGGTGACAG TTCAAAGGAG CTAGAACAGT AAGAGCTGGG TGGCCAGGAA  
 238551 GCTTCTCTGA GGAGGGGGAT TGGAATCCAG TAGGATGCTC TTGGCTTGGG  
 238601 TGGGTGGAGG GCAGCCCTGC TAGATAGGAC CAACCCCAAC AAAGGGATCA  
 238651 AATCAGCAGC GCCTCACTGG CACCTGGGGA GGGAGGGAGG GAGGTGCTCT  
 238701 TCTACCTGTG TCATAGCTAG CTGCCCTGTG TCCTCTGCCA CCAGGGATTCT  
 238751 CTCAGCTCTG AGACTATCTG GAGTGGGGTG CCTAATGGGT TAACTAAGCC  
 238801 CTGCTGATGC CAGGTGACAG AACCACCCCA GTAAATCAAA TGGCACAAGT  
 238851 GTGTTGCCCT TAATGGTGTG GTTTGAGGCC AAATGAGCCT GCTAGAGTCT  
 238901 CTAAAATCAC ACTGTGTAGG AGGCGCCAC CTGTCAGAAT GGGGCCACC  
 238951 TAAGCTGAGC ATTTTGTGGA GAATAAGAAA GTAGGTGCCT GGGCAGTGGG  
 239001 AGGGGCTGTG TCAGGCTGGG TGCCAGGACT TGGTGTCTA ACCTCACCAG  
 239051 GTTGTGACCG AACAAGCCTG GTCCTCCAC CCAACCCCTG GCCAGGTGGC  
 239101 TTCAGTTTCT CCCTCTGTGC AATAGAGGGG ATTGGCCTTA CTGTTTCTC  
 239151 AGTCCCTTTC TCATCATGAT ATTCTGAGAC TCTGCTGTGA GTGGCATGAG  
 239201 ATGTCTCGGT GTGGCTCTCC ACCCAGGTCC TGCTGAGGAG ACACAGGAGC  
 239251 AATGAGCCCA GGGAGGGGAT TAACAGAGGG ACCGCCCATG CTGCAAATTA  
 239301 GCAAGATACC AGCTGCCAAA TGTAACAACT TGTGTAATTG GCTTTTGTGTT  
 239351 TTATTAAGAG GCATGATTCT CTTTAGCCAA GCCTCAAATG CCAGATGGGC

FIGURE 3, page 76 of 188

239401 ATTAACTTT GGAAGATACA GAGATTAACA TTAACAAGAA AAGGACAGAC  
 239451 TTGGGTAGCT TTGGAGGCTG GTGGTATTCA GCAGGCCATG TGTGGGTGTG  
 239501 CCTGCCAGAA CCTGCATGG AGACCAAGCC AGCCTTGGAA GTCCGTCCCT  
 239551 GAGGCTTCTT CGTCTATTGG GATGGGTACC TACATTGGC TCAAGACTGA  
 239601 CTTTTCCCAG CATAAGACAA ACTGAATCCC TGAAGCACCG TCTGCTGGAA  
 239651 AATCCCCTTT ATGCAGAAAA AGCCAGTTGG CACTAGGAAA AGTCTGGCC  
 239701 TGCCAGCTGA TCTTTATTCA GTGAAATAGA ATTATTAGAA TGGGCTAGAT  
 239751 GACAAACCAA CATGTCCACA GTTGGGGGAC AAAGAGGGGA CCAAGTAGAC  
 239801 TTTGGCTTGG AGGGTCCAAG TACATCTGAC AGCAAGGCCA AGGGCACAGC  
 239851 TGCCCATGGG GCTAGACTAC AGGAATGACT ACCCACCAGT TCTGTCTGG  
 239901 TGCACGTTTG TTTCTGGCT CAGGAATCTG TGTGTGATGC ACCTCCCGTG  
 239951 CTAGGGAAC TCACTGGGCA TCAAGAGACC TGAGTTCTCC CAGGCTCTTC  
 240001 CTGTTGCTCT TTGGACCTTA GTTCTACAG AGGTGGCAG TCCCTAAGG  
 240051 TACCTCACT TCTGACATCA GCTGCTCAAT AATTCACCAA AAGGATTCAC  
 240101 AGAGCTCACA AAAACCTTTA TGCTCATGGT TATGGTTTAT TACAGCACAA  
 240151 GGAGACATTA AGATCAACAG AGGGAAGAGG GGCATGGGCG CCAGAAGAGT  
 240201 TCCAAGCACA TAAC TCCCCA GTGTCCCTC CCAGTGGAGT TGTGCAGACA  
 240251 GCACTGGTGT GTGACAATAC ACTCAGAGCA CTGCCAACCA GGAAGCTTG  
 240301 CCTGAGCCTT GGCATCCAAG GATGTTACTG GGACTCAGTC ACATGGATAT  
 240351 GGCTGGCTGG CTGGCTGCAT GGCTGACCGT AGTGTCTGGC CTCCAGAGG  
 240401 TTGAGCTGAC ACCACATGGT CCGTGGCCTC CCACCATAAA TCACATTGTT  
 240451 AGCATAGACT GTGTCATGGC CCAAAGCCCC CAGCTAAACA AAGATGCTCT  
 240501 TATCAGGAG CACAGTCCA GGGCTTAGCA ATCCCCCTCC AGGGCAGGG  
 240551 GGCAAAGGCC AGAACTCCCC TTGGACAAGG GTATCTTTCT TATGCAGAGG  
 240601 CTAGATGAGA TGGTCTCCTG GTTCCACCAA AGTCTTAGAC TCTGGGATCT  
 240651 TGATCCTGCC TGTGGATCT GGGTTTATTC ACAGCAGAAC ATGGAGAACA  
 240701 AAGTTCAGC CAAATGAAAT GTGAAACTGT GTTAGGTTTC TATTCAGGTA  
 240751 CATCTGTGT CACCTGTGGA ACTGTGTTTG ATTTGTTCTC TCCCAAGGAT  
 240801 CATAGCTGGC AGGCTCTTTA AAACCATTAG CTTACATTTC CTTTCTACT  
 240851 CTCTGATCT TGTCTTCCAA CTCCTGATGT GGCCTACTGC AGAAACCCCA  
 240901 CAGTAGCAGG GAAACCCGCT TCCTTGCACT TCTTAACATC TTTCATCCTT  
 240951 GAGGTGCGGG AGAGCCAAGG AGAGAGAGCG TGGCCAAGCT GCAGCTGTTT  
 241001 AAATGGTTCT GCCTGCTGCC GACCAAGATC TGGAGCGAAA GCAGAAATTT  
 241051 GTCACATGTT GTGGCAGTGA AGCCTCCCCA GTTTGCTGTC CTAAAATCCC  
 241101 AGGGTCTAAT TGGAAAGGAA TAAAAACGC AGGCCTTTCT GGGATGCTTT  
 241151 GGTGGATTCT CTAGAAAAC TCTGAGAATA AAGCATTGCC ATATGGCTGT  
 241201 TTCTTGTTT ACCTTGGGGC TAAAGAGAGA CATTCTGGAC TGAAATCTTC  
 241251 CACATTGTTT CAGAGACAAC ACATCCAACC TCACACATTT TTGTGGTGCT  
 241301 AAAAACCAGT CTTGTTCCAC TTTGTGGGGA TATAGACATG AATCTCAGGC  
 241351 CTTTGAACA GGGATTACTG GCTGACTTGA GTCTTTATTC CCTGTAGGGC  
 241401 CTATGGACAT CTTGGTGTCC ATTCTTCTCA TTGCTGCCTA AGCAGATCAG  
 241451 TTGGCTCTGT CTCATCCTTT CCTAGTCCCC AGCTGAGCTC TTCCAGGAAA  
 241501 GAAGAAGCAGT TGTCTTCCAC CAAAGTCTGC CCCCAGCAG CTAACAGAGT  
 241551 CACTATTTCA GGAGAGACCT TCAAGGGGAG GACCCTGAAT GGCTGGGGAT  
 241601 GCCTTCTCAT CCTGCTGTTG TTTGGCTCAA CATTTCATAA CATTTAAATA  
 241651 TTCATTTAAA ATACTTCAAC ATTTAAATAT ATCATTTAAC AGCATTAGAA  
 241701 TGCTCTGCAC CAAAAAATTA AGCAAAGGGA ATTGTAGGAA TTTTTTTGGC  
 241751 CTTTCAAGC TATTAGTATT TTAAGTAGAC CTCAGTTCAA AACTGGAGTC  
 241801 TTGAAAATGG TCCCATTACT ATAAATTAGG ATGCCGCCCT GTGCTTGTGT  
 241851 GAGACGCTTC CATCTTGGAT TGGTCCGTTG ATGTTCTTG GACTGAAGAG  
 241901 CTGCAGTGAG TTCAGATTCT GAGTGCTGGG TTTCACCTGA CTTCTTGAGT  
 241951 CACCAGAGGG TGTGCTTGAG TCACCAGAGG GTTTCCTCCA AGAAGAAAGT  
 242001 GAGGAAAGGG ACATGGGGAA GCAGGCAGAA GAAAGTTTTC AGTGACCAGA  
 242051 GAGGAGTCAG AGTTACGGAT TTTTAAAAAA ATAAATTGCA TGTCAGTCTC  
 242101 ACTCTGTCTG TAAACATGGA TTGAGGACCT GTTGTGGACT TGTGCTGTGT  
 242151 CAAGACCGG CGATACAACA GTGACCATGT CAGACGGTAT CTTGCCCTC  
 242201 AAGCTGCTCA CATTGAATA GAGACAGAGA ATAAACACAT GAACAGACAA  
 242251 GGATGACAGG TGGTAAAGAC CATAAAGAAA AGCATTGAGG GAGATGTTTC  
 242301 AATGCGGAGT TTCAATGGCT GGGGTATCCT CGGAAGGCCT CTGTGCAATG  
 242351 ACATTTGAGA TGAGAGCTGC ATTTTGAGAT GGAGTCAGCC ATCCAAAAAT  
 242401 CAGGGGAAAG AGAGACCCAC ACCAAGGCTC AGCAAGTGCA AAGGCCCTGA  
 242451 ACCTGAAAGG AGCTTGACAC GTTCAAGGTG GCACACAAAG GCCACTGTGG  
 242501 TTGCAGCATC AAAAGTGAGA GGGTGGTAGG AGATGATGTT GGAGAAGGAT

FIGURE 3, page 77 of 188

242551 CCAGAAGCCC AGGCAGGTGG GGCCTTGTGG ATGACAAGAG TCTGGGTTGC  
 242601 CCATTAGAGG AGGGTAATAC TGGGAGAAGC AGTCCCTGTC TGCAAGGGGT  
 242651 GGAAGAAGGG CTGAGGGCTA GCCCTCATCC CTTTGTGCGG TACCACCAGC  
 242701 CCTGCCCAGT CGTGAGGCTT GCAGGCTGCA GGAGGCTGAC GCAGATGGTG  
 242751 AATGTTAATA CCCGTGGCCC TGGTCCGACC TTTTCAGCAT TCGGTGTTCT  
 242801 GATTAACTGG CCATTCTCCC TCTTCAGCAC ATGTTGAAGA TACTTTGTTC  
 242851 AGGAGGAAGT TGAATGGCC AGCCCATCTA ATAACAGAAT ATTGAAAAGG  
 242901 TCACAGCAGT ACGGCTGAGT TCTCCAACCT ACAAATCACA GGGAGCGTCA  
 242951 GCTCGGATAA CTCATTCTCC TGACAAATCA AGGAGCAAGG ACTGAAGACT  
 243001 GCACCGCTGA TTAGGCTCAT GGGAAACCAG AGGGCCAGGG AGAAATCGAT  
 243051 AGAACATCCT GCCTCGTGCA GGGGTTGAGG GCAGCAGGGG TGCTGATTAG  
 243101 CAAATCAGCA GGTGGGGGCA TGCTGTCCCC TGGTGGCCGC TCAAATGACA  
 243151 GCCGCATTTG AAAGACCCCA GAGGGGAGGT CCCATCTGGA CCTGCCTGGG  
 243201 TGGTCCCCCT GGCCTCAGCA CTGGGCTGGA GATTGTTACC ATTTTACCAG  
 243251 AAACTATTA AAAAGCAGCT TTCCCCAAAT AAAACATTTG CCATTAATAAT  
 243301 CCCTAAAAGT TGATCTCTTT CAGGATATCT TGTGTTCTTT TTCCATTAAG  
 243351 GTTTATTATT ATTATTATTA TTATTATTTT AGAAATTAAC TTTTGCCATG  
 243401 ACCAGCCTTT TTAGGTTTTG ACTGCAAGCA ACAACAGTCA AAACCTCAAAC  
 243451 TCCTCGTAAA AGGAGGACAG GTTTATGGCT TAATTTACTA CAGAGTTCCA  
 243501 CAAACAACAT TAAAGAAAAA TGAATGATTT AATTAAAAAC TGGGCAATTA  
 243551 ACCTTCTGTG CGCTAAAATA GAGGGCTTTC TGAGGGCTTT CCACAGAAGC  
 243601 GTGTCTTCAT CTGTGAGGCA GCGGCCTCAG AGAATCTTAA TAGATCAGTG  
 243651 AAGCTGGATT GAAGTGGAAA GCTCACCTTA AAAAGAAATC TAAGGAGATT  
 243701 AAGAGGGGGA TGAACATCAA AAATGACTCT GATTAAGCCA AGATAAAGAA  
 243751 TGCTAGAATC TGAAAGGGAG AAACAGCATA CACAGAATAT ATTTTAAAAA  
 243801 CCACGGGCAC AAAGATTTTC GTGGGCTTTG GAGATAAGGG GGAAGTACAT  
 243851 TTTGAGAACG GTTGATAAAA AGCTTTTTCAG CACAAATGTT CATTTTCACT  
 243901 GGGGGCTGAG CACAAAAATC CATGGACAAA ATTGAAATTC TACATGCTAA  
 243951 GAGAAGACTA AAAGATTTAC TGGCACAGAT TCAATTAAGT GGCTTAAAAA  
 244001 ATGTACCATT TCCTTCAGCA TTCATTTAGG TGCCTGCCCT ATAAGTGCAC  
 244051 AATTTCCCAA ACGTTGCTTG CTAATGTGTC AGGAGGGATG ATTCTGTCAG  
 244101 GAGGAGCAGG GAGTCTTCAT CATAGGACCT TGAATCAGGG CTCAGCAGGT  
 244151 GTAAGAGGCC CCTGGCATGG GGCAGCCCTT GCCAATTCCT CCTTTTGCAG  
 244201 GGGCCTGCTG CCACCTCGAT CAGGAGGTTA GGTGCCCACT GGGAGTACAC  
 244251 TCAGAGTCCC CTCTGAAGTT TCAGGCCTTG AGACAGCAGG CTTTACTTGT  
 244301 GACCACCACC ACCCACCCTT ACACCCCAAA CAGAACCAGG CTTTAGTTGT  
 244351 TACAAGCAAG TCTGGAGACC TGGACTTTCA GAAACAGAGC CTAGCTCAAG  
 244401 ATGCACTTTG AACATGTCCC TTGCTGAGCA GTGTTGGAAA CTGTTGACCC  
 244451 CATGGGCACT CTTGGTTCCA TATTTCTGAG TTGTCAATCG CCTGCTGATG  
 244501 CTGGAATGTC AGGCGTGTCC TGCCTTAGCC AGGCTGCCCT GTTCAGTGAG  
 244551 AAGGGAATTA TTTAAAGATC TGTCCCCAGC AGCACATTCA GGGCCCAGAG  
 244601 GTGGGCTAAA GCATCTACGG GAAGGCTGGT GAGTTATTGC AAAGTGCCAA  
 244651 GTGTTAATTC AGTGCCCTCT GAGCCGCCCT CTATGAATTA ACCCAGCCAT  
 244701 TAGAACAATA GAGTTAGCTC AGTGTGAGGC CAGCTCAGCG GTGAGAGGGC  
 244751 CTGCACAAAG CTGTTAAGGC TGATGGAAG ACAGGGGTGG GCAGGGTGTG  
 244801 GGCAGCCCTC ATTTTAGACA ACCCTTGGGA TGTGAAATG CAGCTCGACC  
 244851 AAGGTAGTAA GCAGGAGTTT GGTCCCTGTG GTCCACGGCC TGCCAGCTCT  
 244901 GAGATGCCCT CAGCCCAGGT TTCATCCTGG CTGTATTGCC AAGTACACTG  
 244951 GCTGGAGGTT CAGGAGCAGC CTTGTTGGCC TCCCACGTGG ATGCTAAATG  
 245001 TTATTTTAA GGCAGAGCA AGGAAAGTGA AATGAAAAG CACTTAATAT  
 245051 AGTTAGACCT ACATTGCGGC TGGCCATTCA AATTCAGGGC TGGACGGAGT  
 245101 ACTTCAGGCT GCGGTGGTCA GGAAGACCT TCCTGTAGT GACCAAGCTT  
 245151 GGGGGAAGGC GTGATTGTGA CAAGTAGAAG AAGAAAAGTC ATTAAGGGTG  
 245201 GGAATTTCCA GAGTTGCTGG GGGAAAACAA GGATTGAGGG GGCTACCGTA  
 245251 AATGACTCCC CCATAACCTG ATATCCCCCA AAGGAAAAGC AGTACTAGAG  
 245301 CTGAGGGCCT CCTGGAACAC CCCCACTCAT GGAAATGTGG GCAGCTTCTG  
 245351 TGGGCACTTG GTACCTGTCC CTGCTGCCCC CCACCACATG CTTAACCATG  
 245401 AGGTAATTTG TACACCTGGT TTTGTTTGTA TGTTTTTTTT CTCTGTGAAG  
 245451 TATGCAGATT ATTCAAAAAG AGAAAATAAA GAAGGGTAAT TATTTTCTT  
 245501 TAAGAATGAC AGCGCAGTCA TAAAACCCCA AATGGAGGTA AAAAGGGAAG  
 245551 AAGTTAGGAG AGAGAGAAAT CAATAAAACA GAAGAGGTTT AAAATAAGAG  
 245601 CTCTAAAGGG CTGACAGCTA TAGGAGACAG GAGAGGAGGA ATTAGCCTGG  
 245651 AATTTAAATC TCAGATATTA AACTTAAGAT GAAATAGAAA AGAAAGAAAG

FIGURE 3, page 78 of 188

245701 AAAAAAATGA ATTTTAAAAAT GAGTGATTGA AAAAGGAGAT AGGTAAAGG  
245751 CATAGTAATT GATGAGTTAA AATAAAAGTA TGAGATGATG CTTTTAAAAAT  
245801 AGAAATTAACT TAGGATCTAG AAATGGCTGC TGAGACTATG GGAAGGAGTT  
245851 CCCGGAGAGC AGGGGCCAGG CCTGGAAGCA CCTCCTGTGC TCAGCCTCGC  
245901 CCTTGTGTTC TTTTGCCTGC TCTGGACAGG GAGCATTTC CAGTCTCCAT  
245951 GGGCAAGGGC TGCCTTCCCA TGTGCACAGG CACACAGCAG GCCCAGAGGC  
246001 CTCAGCCCCC AGACCTATCA GAGAAATCCT GAACGCATAG ACAGGGAGCC  
246051 CCACAGACGC ACTGAGAAAAG CGCTCAGGCT ACGTGCTGGG TGAGTGAAAA  
246101 CTTATCAAAA AACGCAAGTG AACAAAGGCT CCTCCTGCCC TCTTTTGGGA  
246151 GGAGTGAAGT GGTTCCTACTG CCAAACTCTT AAACACTGGT TCTCAACTCT  
246201 TTCAGATCCA GTGCCGACTT TTTAGAACAA ATATTTAATA ACACCCCATG  
246251 TATTGCCCTG AAACGAAAAT TATAGACAAT GTAATCCACT TCCACACTTA  
246301 ATTTCAACAAT ATGATGTCCT AATTAAAATA TAAATGAGAA ATACAAAGGA  
246351 AGTAATTTGT AGTAAATAT TACATATTTT AATATGCAAG ACCACAGTGG  
246401 AATTCATAAT GATGTAGCCA GATGCTGGCA TGAAGGCAGC CTCTACAAAT  
246451 ACAACTGATA CAGGTTTATG GAATTGGCAA CTCATATGCC ACAACACTGT  
246501 GTTGCCATTG CAGACGAGAT AATGATGAAC AACTGTTGAT AAAGTTCTGA  
246551 ACAAATAAAT GTGTACTCAT TCCTTGGTTT TTATAGTAGT TGTATCCCAG  
246601 AGAAATTCCA AGTATATTAA GCCATGCACA AAATACTTTG TATTCATGGA  
246651 TAACTAGAGT TAGGTTCTAG GCTCAAATAA TTATAAATAT GTTTTCAACT  
246701 ACGTGAATAT CCAATGGGAT ATCCAAAAAA TGGGGGCATG TGACAATGTA  
246751 TTGTTGTGAA GGACTGTCTT ATACAATGCA AAATGTCTGG TATCCCTGGT  
246801 CCTTGCTCAC TCAATACTAA CAGCAACCCC ATCCCCACCT CAATCATTGA  
246851 GACTGCTGAA AATGCCCCAG TGATTGCCAA AAAAACCCT ACAAGGCAGT  
246901 TCTGCCCCAC TTAGAACCAC TGTCTTAGAG GGAGAACTT GTCAGGACTA  
246951 GAAGGCATTT GACACCTCCT TTGGGTTTCC TCATGGCTAT ACATTCCCAG  
247001 TCTCAAAATT TTTAGGGAAA TTTTGGGGT AAAAAGGGAC ATTTGGAAGC  
247051 AAGAGCAGAA GACTCTGAAA GAGATACCTA TCGGTTTTGG CCAAGATGTG  
247101 CTGGTCTGAT GCTCCAGGGA GCCCTGAGAT CCTTGGGCAG ATAAGGATGA  
247151 AAAGAGGAAA GATTGGAGCT CAGGCAGAGC AAGAGAGGGC CTGCTGCTGT  
247201 TGTAAGAAGAA ACTGCAGATG ACAGAAAGGG TGCTTCTCAA TTAGATAGTA  
247251 AATAACTATA AAGGATTATC GCAGTCAACC GCGAAATCTC AAGATAACAT  
247301 ACAAGGGGGC AGAGGTAAGG GTCTCCCACT CCCAGGATGG TTTTCATCCA  
247351 GAGACAATAC CAAGTCATTA GAAAGCTCTG GAAAGAAGCC AGCACTGCAG  
247401 GGTCGGAATG CGACCCCTCC TTGAAAAGTT TATTAGAGCG AGAAGAGGTC  
247451 GGAATCATG TTTGAGACTT GCTCTCGGCT TCAAGGGCTC AGAAAAAGTT  
247501 AATCTGATGT TCTCCTGACT CTGGGTCATT TAACTCAITT CTAAATGGG  
247551 TTTCTTGCTC AGAGCAGAAAT TTCGAGGTTT GTAAACTCCA AGAAGAGAAA  
247601 AAAAGGTCTT ACACAATTGT GTTATTGTGA TTGAACAGTT TTATTCTCAA  
247651 AGATTTAATT TCCCAAATTT TGCTTTAGGA ATACACGGTA AATGCAACAC  
247701 ACGGTAAGAT GGCAATTAAG CTCCCTGCGT TAGGGAGTAT CACTCACGGT  
247751 GATAATTGGG AAACATGACA GAGAATGGGA CGCGCCATCT CAGAAGAGAC  
247801 GAAGAGGCTT TTCAATTACT CTGGAACCTT ATTTATTATT TTTGAAGGGT  
247851 AATGCATTGC CGCTCTTAAC TGTCTGAAAT TAAAGTGGAC GTTGAAAACA  
247901 TAGCCCTTCT ATGAGCTTAT TTTTATTTTT ACTGAGCATA ATTGGACAAT  
247951 ATAAAAAGTT TACTTTTTAA ATGTGTCATC TCTTGTCTTCT TTAATACTGT  
248001 AATCACATCA ATAGGAACCT TGCTGTTGAG ATTTTATGTC TTTGTCTAGG  
248051 TTCCTTTTCC AGCCTATCAA ACTTGGTAAA TTTAAAGATT GTTCACAAAT  
248101 AATGAAAGCT GACTTGTGTC AAAAAAAAT AAAAAAAAAT AATTATTGCC  
248151 TGAAAAACAA CTCTAAGAGA CACTATAGTG ATGTTTATGT TTTTAACTT  
248201 AAGATTTGAA GCAGGAATAT TTTGAGACTT AGATTCTGCA AAATGATCAT  
248251 TGGACCAGAA CACATTTTCA TGTGTTAAGG TCAGATCTTA GAGCCAGCTT  
248301 TGAATTCAAC AGTGGGTTCT TTCTTTCTCA TCATCAAATG GGCTTTAAAA  
248351 GGTCAGGAA CAGCGAGGTG CTGGTGGGAG GAAATCGCC AGAATTCTC  
248401 TTTCTTATTT TGAGTAAACG TTGAGAAGAT TGTACTTGGG GTGTACTTTA  
248451 TAGGTACCCG ATTGGGGACG AAGAGGAGAG GGACAGGGTG GTTCCCAGT  
248501 AAGGCCCCAG CCTGCGAGG AAGGGAGGCC ACGCTGAGGG TCCACTGTTA  
248551 GGGCTGTTTG ATTCTTGGGC AGCACTTCAG GAAATCTGTT CTCTTGGAAC  
248601 CCACTTATGG GGTTTACAAA GCAGAGAGCC TTGAGGCAGG CTGGAGCTCA  
248651 GAATACTGCG TCCCTGTGCT GCCAGGGCAG TCTCAGCAGC ACGGGGAGTC  
248701 AGGTAGAGGC CTTTCCACAC CTGCCCCTGGC CTCCTTGGCT CCCCAGGAAA  
248751 GCTCCCGTGA GGGACAACCT AGGCCATCAC CAGCAGCAGA ACGGGTAGGA  
248801 AAAGGGGCTC AGAGAAGAGT TTCAATTAAG CCAAAGAAGA GTAAAGGAAA

FIGURE 3, page 79 of 188

248851 TGCTTTTAAA AGCTGAATGA GGGTGGGGCA GATGTGGGGC CTTTCATTAA  
 248901 TTCAAGTGTA CTCTAAATCT TTAAGAAGCA AGACACTAAT ATTACTGCCA  
 248951 ACAATAAGTG GCTAAATTCA GTGAATTTTG ACAAAGGCAT CACACCCATG  
 249001 TAACTACTAT GCCAATCAAG ATACAGACCA TTGCTGTCTAT CCCAGAACT  
 249051 TTCCTCCCGG TGCTTTCCTA GTCAGTCCCC CCATCACTGC CCTGCCAAGG  
 249101 GCCATTGCTG ATCTGATTTT TAATATGATA AGTTCGTTTG CCTATTCTAA  
 249151 AACTTCTTGT AAGTACTCTT TTGTGTCTGG CCTCATTTCC TTGGCTGAAT  
 249201 ATTTTGTAAA TTCATCACCT TTATTCATCA GTCTCCCATG GTCAGTCAGT  
 249251 CTTACATAT CCACAGGAAT TCACACTGCG AATAAACCAG GAAAATGATA  
 249301 GATACAGTCC CTGCTTCTT GGAGTTTACT ATGCGCCTTT TGACGCAGCT  
 249351 TCTCTACTGC CAGGAATCTG TCCCAAGGAA ACTATCACAA TGATACAAAA  
 249401 AGATGTAGGT GGCAGCATT CCAATATTAG TGAGAAAGGC ACACAGAATG  
 249451 GCCACCAAAG ATTAAGTCAT TTATAGGAGA AGGGAAGGAC CAAATCCTAT  
 249501 GCATTGTTC ACATCACGCT CTAGCTAGAA GAGCGGCCAA TGGCAAAAAGA  
 249551 AATGCCAACA GGTAAAGAGC AAAAAAGTTA GGGTATACAG AAAGACCCCA  
 249601 CCGTGTGAGA ATTTCCACAT GGGTAACCAG ACCTGAATGC TCACTCTGCA  
 249651 TGTGGGATC ATCGGAGACT TATTTCTTT TAGTTCTTT CTTTATATAT  
 249701 CCAGTTTGTG TTCAGGGAGT ATGTGCTGTT TTGCAATCGG GAAATAGCAT  
 249751 TTTACTTAAA AGAAGTGGGA GGCTGAGGCG GGTGATTAC TTGTTTGAGA  
 249801 CCAGCCTGGC CAACCTGGTG AAACCCCATC TCTAATAAAA ATACAGAAAT  
 249851 TAGCTGGGTG TGTGGCGGG CGCCTGTAAT CCCAGCTACT CAGGAGGCTG  
 249901 AGGCATGAGA ATCGCTTGAA TCCGGGAGGC AGAGGTGCA GTGAACTGAG  
 249951 ATCGCGCCAC TGCCTCCAT CCAGCCTGGG CGACAGAGTG AGACTCCGCC  
 250001 TCAAAAAAAA AAAAAAATA AAAAGAAATA GAACCCTGGC TGGGATGGGC  
 250051 CCCATCGTGC AAGCGAACAC AAGGTATCAG CAGCACGGGC TTCAGGGCCT  
 250101 GGGGAGGACA GCCTTGGCA TAGCCAGCCC AGGCCCCCTC GCCCTCCCTG  
 250151 CTGGGGGCTG CCTTTGCTCT CAGAGTCCTG CCCCTGCTGC TTGATTCACT  
 250201 GGGAGAACAA CACGTAAGGC CGTCATTCTT CTAATCAGCC TTCCCAGGTT  
 250251 GATGCTGGGA GCTGACGGGC TGAATTGGCC AGTGTGTTTG TCAGGATGCT  
 250301 GCTTCTCCTT CCCCAGAT AGTTATAGCC AATTTCTTGA AACTATGAGT  
 250351 ATGTCCCCTT ACATGGCACA GGGACTTTGC AGGTGAAGTT AAGGCTCTAG  
 250401 ACCCAGGGGA GTTTATCCTG GATTATCCGA GAGGGCTCCA TGTAATCATA  
 250451 AGGTTCTGCT TATGTGAATG GGGGTCAGTC AGAGGAAATT TGAGGATGCT  
 250501 GCGCTGAAAT GAGTCAGGCC AGGTGGCATC CTACAGCAGA CAAGGACAAG  
 250551 CTGAGCAGAT AGCAGGTGGC CCTGGGTCCA CTGCACACTT TGCCAGGCTG  
 250601 AGCTGACCAC AGACTGGCTA GCATGGCTGG AGTTCTATGC CCAGCCCAAG  
 250651 CCGACTGGTC CTCCTGAGTG GGCACCAGCA CTGACTGTGC TGCCTCTGCC  
 250701 CAGACTCAGC TAGAACAGGA GTGGGCTGAG AAGCTGGGGG CGGCAGAGGC  
 250751 CTCTGGAAGG CCCCAGGTGT TTTGTGGCCC TAGCACACTT CTCCTTTGGG  
 250801 GACCTCAGCA TGGGTGTCTC CGAGCCCAAG TCAACTACTT TGGCCTCATT  
 250851 TTAGGGGGTG TGGGGGGTGC TAGGGAGAGA GGCCAGAAGG AGTAAATCTT  
 250901 AAGAAATGAG GTAGGCAAGA AACCTGGGTC TGCAGAGCCT GCAGAAGCCA  
 250951 ATGAAGCAAT GAAAGGGCCC TGTAGGTTTG GAAGCAAATG GCCGTTCTCA  
 251001 CGGTTAAGTT ACTTGGGAAG AATTCCATTT TGCTTTACAA GGGATGATGT  
 251051 CAGCTTTAAG CCTTAGCTGA AATCAGCCCC TTCTAAACTG TAAACAGACA  
 251101 TTGATAGGCC AAACACAAC AGAAATTGGC TCCCTGGCTC CCAATCCCTG  
 251151 TCCCTTTTTT CTTACTGCC AGTTTGTTGT TTGTATGAAT ATCTATCAGC  
 251201 ATCTCCTGTG AGCCAGGCTG AAGATGCAGC TAGAGAGAGG AGCTTCTGCC  
 251251 TTGGGGGCGAG AAGAGAGGGA AGAAAGTGAA GGAAGTGCTT CCAGTCTGGA  
 251301 GGAGGAGACA GAGAGGCCAA CGGGGAGTTC TCCTAGGGGC AGGGCAGGGC  
 251351 ACGGGGACAG CACAAACAGG AGGGGGACTG AGACTCTGCC AAAGGATCAG  
 251401 AGTTGCTCTT CCAAGGCCAG CTGAGGTGAA TCACACCAA TCTCAAACAT  
 251451 GCTGTCTTCT CTGTCCCACT TGCCAGGGAT CTGATCTAGC CACACTGACC  
 251501 AGCAGGCTAT ATTGGTCCCT GCGGGGGTGC TGTCCAGGGC TTTGCAGTCC  
 251551 GCCCCAGCTC CACACTTGTG CCAATGGAC TTCTCAGACT CCAGAGTTAC  
 251601 TGCAACCTTT AGTTGGGTGC TGGGCCCCC TCTGGCCCTG GACTGTAAAA  
 251651 CCAACCTGAA ATGGAAGAA GGGTGGCATG GCCCTTTACC AGCTCAGCCT  
 251701 CCAGCACAGG CTCTTCTTGA TGGGCAGGGA AGGGGCTGTG TGATGTGGCC  
 251751 TAGGGCCTCG TTTGCATGCC CAGCATTGTC CCCATAAAAG TCCTGCAGGA  
 251801 AGCTGTGAGG GGTCCCTGTC CAAAAAGACT GCGTGGGCCT GAGGGATCCC  
 251851 TGCGAGGCAG GCCAGGAGGC AGCCATGCTT CACACCACAC AGGTGGGTCT  
 251901 TTCATGCTTT TTTTCCCTTT AAGTTTCTAG TCTTGTGGCA ACCCTGCAGT  
 251951 TGACACTTAC AAAGTGTTT CTGCTCACTT GTCACTACCA TATACTTACT

FIGURE 3, page 80 of 188



252001 CATCAACGGG CTCCTGGGGC CTCTCTGGTA ACCAGTCCCA TCTGAAGAAA  
 252051 GCTGAGAGGT TTCCTGAAAC ATGCTGCAGG GCGTCTACC TGTCTTCTC  
 252101 AGCCTGGCCT CTCCCAGGG GAGGTGGCTG GACCTTGGGT CTAAAACTTG  
 252151 GCCCTGGCCA TCAAAACTCT CCATGACATA CTTCTTCTC TCAAATTCCC  
 252201 CCTCCCAGTA CCTCCTCCTA GAGTCCCTCC CAGACTTCAT CTCTAAATCC  
 252251 AGGTTCACTG GCATATCCAG GTAGAGATCA GTGGACTACC TGGGCATGCC  
 252301 CAAATTTGTC TTGGCGCCCA CAAGCCATGA GCCCATGAAT GAAGGGGCTG  
 252351 ATTGGTGATG ACAGTGGTGT CCCCAGGGCT TAGCACACAG TGGGCACACA  
 252401 GTATGTGTTT GTGATTGAAT CTATGGCAA TAAGAATTAT TTCGTAGTGT  
 252451 ACATAGCTGT CTGCATGAAA AGACTATGTT TTCATGATCA GGACTTCTTA  
 252501 CAGCACAGCC CCCTTAGCCC TTGGCTGTGG GGGAGGTTTG GGCAGCAGTT  
 252551 ATAATGGCC TCCAGGACCC AGAAGGCCCC CTGGGACCCA GGCCCCAAG  
 252601 CCTCTGTAAG AGGCCTTGAG CCTCTTCCTC TTAAGATA AAACACTAGC  
 252651 CATGCGAGGA TTTCTGAGA TGCTGGACA TCGTCTCTCA CTAAGAGTCA  
 252701 GACAGTTCTC GATCCATCTT CCCATGGGAC CAGGGCACAG CCATGGGTGT  
 252751 TGGTTTCAAG GAGTTTCTCA GGAGTGTGAA GGGGAGCACG GACCAGCACA  
 252801 AAAACAGAAT TCTGAGTCTG AAATAAAGGA TTAGAAACCC CTTCTTGGCC  
 252851 ATTAACCTT AAATAACTAG AAGATTTGTT TCCTACTTTC TTTTAAACAA  
 252901 AAAGTAGGCA TTGTTGTGTT GTTGTGTTT CTTTTGTTT TTGTTGTTT  
 252951 GTTTGTTTTT GAGACAGAGT TTTACTCTGT CGCCCAGGCT GGAGTGCAGT  
 253001 GGCACGATCT CGACTCACCA CAACCTCCGC CTCCCAGGTT CAAGCAATTC  
 253051 TCCTGCCTCA GCCTCCTGAG TAGCTGGGAC TATAGGCATG CGCCACCACA  
 253101 CCCAGCTAAT TTTTGTATTT TTAGTAGAGA TGGGGTTTCA CCATGTTGGC  
 253151 CAGGATGGTG TCGGTCTCTT GACCTCATGA TCCACCCGCC TTGGCCTCCC  
 253201 AAAGTGCTGG GATTACCGCC GTGAGCCACC ATGCCCAGCC CAAAAGTAGA  
 253251 CATTGTAAAT GCTAGTCCTA AGTTTCTGCT AGAGCTTAGT GTGTCTTCTG  
 253301 AACCCAAAGA AACATTCAGT CATATTCAAT TTAGCTTCAT GCTAAGTGTT  
 253351 ATTTGTTTTT AAAACTTGGG AAGCTGTCTG GGAATAGCTG AGGAGAGCAC  
 253401 TCAAGTGTCT AGAGCACTGC CTTCTCAGC CAGGCTGCAC AGACGTCTAG  
 253451 CACAGGTGGC TGGCACCTGT GAATATGTAT TCTGCAATTC CAGTAGCACC  
 253501 TGTCAGGATG CTACGCCTCT TTAACATGC AAACACATA CCAACAACAG  
 253551 CTAGGGCTG ATAAAACTG CCCTTAGGAG TTCAGCATCA ACCACAGCCA  
 253601 GAGACCGCTG CTGACAGCAG GGCTTCCTAG ACTCAATTAG CAGTAGACAG  
 253651 AGCCACCAT CAGCATGACA GGAGCCAGCA GGCACAGAGC AGGCCTAGGC  
 253701 CCAGGCCAGC ACGGCAGTGA CATTCCTCAT CCCACACATG CATGTACATT  
 253751 ACTGTCATCA CTTGGGTGCC ATCAGTCTCA CTCTCTGGTG GAAAGATGGT  
 253801 GCTCCCGGG CTGCAGGTGT GATGTAGGTG ACGTGAGATC TGCATGGGCA  
 253851 CAGCTGTGGC CTTTGAATTA TAAGATTGTC TCAAGGCCAT CAGCTAGAGG  
 253901 ACTGGTGCTG TGCCCTTAGT TATACCAGTA TCTATGGATT GGTCTCATGG  
 253951 ATTCCCTGCC CAGTGCCCCG CCCTTTGCCC ACTCTCTGAG GCCACAGGAG  
 254001 GGATGAGTTC AAATCTGTG CACAAGGAGC TTACGTGGTC TCATTGAGGA  
 254051 AGTAAAGGA ACTGCCAGTT ACTGCTGGGT GTGGATTAC TTTACTTCCT  
 254101 CAGTGAGACC TGGGCCTGGG CCACCAAGGC TCTCCAGGAT GTCCTCTGCA  
 254151 TGTCAAAACT TCAATGCACA CTCAACCAG AGGGCTGAGC TGGAGGAGCT  
 254201 TCCAGGCCTA CCCAGTCATC TCCATCCATC TTTGAAAACA TTCATGGAAC  
 254251 CCCTTTTAGA ACCAGCTGAT CACATTCCCA TTTCAGCAAT AGGGATTGTG  
 254301 CGCTCCTCTG TCGCAGGGCC AAATGGCGCT GGCTCATGCG TGTGTCATT  
 254351 TAGCCCTTG TCTCTTTCCA CCCTGGTAAG GCCTTAAGGG CTTCCACCT  
 254401 GGTCCGTAGC ATCATCAACT CCCTGTGCTT TTTTTTCTT TTTGGCGGCT  
 254451 ATCTCTCCAT CCTTATAATA GTCCTGTATA ATAGGGGTCA GTTTACAGAT  
 254501 GCACAAACTA AGGTTCTGGG AGGATAAGTG ACCTCTCTGA GGCCACGTAG  
 254551 CAGGAGCAGA ATTAAGACCG GATGCAGCTC CTGACCCTGC GGCCAGTGCA  
 254601 GAATAGCTGC AGGGGCTGT TTTCAAAGC CCACCCCTTG ACCTCTGCCC  
 254651 CAGTCTCAGT AACTCTGGCC TGCTGTCTCT CAGCAGGGAA GAGCCAAGCA  
 254701 GGATGAGCAC TGCCCCCGCA TGTCCAGAAC GCTGTCCAGC ACGCTCAGGG  
 254751 CTCCTGCCG TGCTCAAAGA ACTGGCCTCT GGAAGTGCC ACTGCAACCC  
 254801 AGAGGCCCGT GGTGAACAAA GCCCGCAGG CAGCATGCCT CCTTCTGT  
 254851 TCTGGGGTTG TTATTTTACA TGGCAACTGT GTGTGTGCGC TAGTGACAG  
 254901 TTATTTTGT CTTTGGCCTT ATGGCCTCTG CTATAACACT GTCAGGTGGC  
 254951 AACTTTTTTA GAAAACTTC TAGAAAATGT TGATCCAAAT TGTATGACTC  
 255001 TGGTTGTCCC ACCCCACCT CACCTAGCTC TGTCCCTCAT TTTCTACAAC  
 255051 ATCCCTCAT TTTCACTCCT AGTTATTTCC ATCTGAGAAA TGGTGCCCCA  
 255101 CACACTCTCC TGCCAACTC CAGGGGAGGG CAGGAGGAAC GCCTGGGGCC

255151 TCTTTTGGGG GTGTGGAAGG GACCCCTCGC ACGCCCTTC AGACCGGGGA  
 255201 GCAGTCTGGC TCCAGCCAC ATGCAGACCT TTGCTTCCTC CTCTGCAGAG  
 255251 GGGTTATTTG TCCATCACC AAAATTAGGT AGGAGAGAAA AGAAGCCATT  
 255301 CAAGAAAAGA ACTTTTCACA GTGCATTTCC TGGCTTGGCT GTGAATGGCA  
 255351 TTTGTAAGGC CCAATTACAT AAACACGGAG CTAACCAAAA TGCTATCTGT  
 255401 CTTTATTGAA GGGGTGGAGG AGCAGGAGGG TGTTTATTTG TAAAGGGGGT  
 255451 AGGGGAAGTG TGTAAAAGAG AGCTAAATTC TCATCTTTAT ACTGGGAAGT  
 255501 TAATAGATGC CAAATGCACA AGTAGGATAT TTTAAGGTAA ATTCCAAAAG  
 255551 AACCAACTAA ATGGGCTGGA AGGGGAGAGA AATGGGAAGA AGAGGACAGA  
 255601 TCTGCTGTTT TCCATTTAAA AACCTTAAAT AATTATTGGA CTGTAAATTA  
 255651 TGGGCTTATG TATCTTTGAT TAAAAATATA TTTTAAAGA GTGTTTAAAA  
 255701 TATTTAAAGC AATAAGCTAT TCGCAATAGC AAAACATGG AATCAACCCA  
 255751 GGTGCCATT AACAGTGAAT TGGATTTTTT AAAATGTGG TACATACACA  
 255801 CCATGGAATA CTACGCAGCC ATAAAAAAGA AGGAGTTCCT GTCATTTGCA  
 255851 ACAACATGGA TGCAGCTGGA GGTCATTATC CTAAGTGAAC TAACGCAGAA  
 255901 ATAGAAAACC AAATATCACA TATTCTCACT TATAAGTAGG AGCTAAACAT  
 255951 TGGGTACATG TGGACATAAA GATGGGAACA GTATTTGAGA CCGGCCTGGG  
 256001 CAACATGGTA AAATCTGGTC TCTACAAAAA TTGTAAAAAT TAGCTATGCA  
 256051 TGGTGGCATG TCCCTGTAGT ACCAGCTACT TGGGGGGCTG AGGTGGGAAG  
 256101 ATCACTTGAG CCCAGGAGGT TGAGGTTGCT GTGAGCCAAG ATCACACCAC  
 256151 TACACTCTAG TCTGGGTGAC AAAGCGAGAA CTTGTCTCAA AGAAAACCAT  
 256201 ATATATATAT GTGTATATAT ATGTGTGTGT ATATATATAT ATGTGTATAT  
 256251 ATATGTGTGT GTATATATAT GTGTATATAT ATATGTGTAT GTATATATAT  
 256301 GTGTGTATAT ATATGTGTGT GTATATATAT ATGTGTGTAT ATATATATAT  
 256351 GTGTGTATAT ATATATGTGT GTGAGAACAA AAGACGTGGG GACTAATGGG  
 256401 TAGGGGTGGC ACTGAGCAAG GGTGAAAAAC TACCTGTTGG GTACTATGCT  
 256451 CACTTCCAAG GTGACGGATT TGGTCATATT TTAAACCCCA GCATCACACA  
 256501 GTATACCTTT GTAACATCCC TGCATATGTA CCCCCCAATT CTAAAAAGTT  
 256551 GAGAACAACA AAAAAAGCA AAATAAAATA TTTAAAGCAA TAAGAAATTG  
 256601 TGACAGATCT AAATACTCTT CAAAAATAAA AAAAAAGAGC CATACTAGAC  
 256651 TTATAGGAAA AATTTAATTG CTATTTAATT AAAAATTCAA AATATAAGGC  
 256701 CAGGTGCAGT GGCTTACACC TGTAATCTCA GCACTTTGGG AGTCCAAGGT  
 256751 GGGTGGATCA CCTGAGATCA GGAGTTTGAG ACCAGCCTGA CCAACATGGC  
 256801 AAAAACCCAT CTCTACTAAA AATAAAAAAA CTAGCTGGGC AAGGTAGTGC  
 256851 ATGCCTGTAG GCCCAGCTAC TAGGGAGGCT GAGGCAGGAG AATTGCTTGA  
 256901 ACCCAGGAGG TGAAGGTTGC AGTGAGCTGA GATTATGCCA CTGCACTCCA  
 256951 GCCTGGGAGA CACAGCAAGA CTCCGTCTCA AAAAAAATA AAAATTAAAA  
 257001 ATATAGATTA GGCAGCTGAA GAGAGAATTA AAAATTTGGA AGACAGCTGA  
 257051 AGAAATAGCC TAGAATATAG CATAGAGAGA AAAAGAAAAG GAAAACATAA  
 257101 AACAGCAGCT AAGATATGGG TGACAATGAC AAGAACCCAT ATACATCTAA  
 257151 TAGGAGTTAT AGAAGGTGAA AATAGCAAGA ATGAAAAAGT AATGTTTGAA  
 257201 GAGATAATGG CTGGGAATT TCCAGAATTG AAAAATACTT TCATCTTCAG  
 257251 ATTGAGAAAG TATAATAAGT TCCAGGCAA ATTATAAAG TGATTCAAGA  
 257301 CTTAATGGTA AAATTGTAGA ATGTCAAACA TAATGAGAAA AACTTAAAG  
 257351 CAACCAGAGA TAAAAGACAT TACCTACAAA GGGACAATTA TATAGACAGA  
 257401 AAAAAACAC AACAGATGCC AGAACACAAT GGAATAATAT TAGAAGCTAC  
 257451 GAGAAGGGCT CAGGTATAGG GACTGGAAAT GCAGCAAAGG GGCAGTGGAG  
 257501 ACATCTGTGC CGCTTTCCT CTGCTGGCCA AAATAAAAAA ATTTACATAT  
 257551 GCAGATATTA CTAGTTGCCT TCCACTAAAC ATCTTCCCAC CTCCTCCTTT  
 257601 AGTAACAAAA TCTTGAAGTT ACCTGGACAC ATTGCCATTC AGATAAGAAA  
 257651 CTACCTTTCC CAGCCTTTCT TATAGCTAAG TTAGCCTTCC TACCATGTTC  
 257701 TTTTCAATCA GATGGAGCAG AAGTGTTATG TGAAATTTCC AGAAAGCCAC  
 257751 CTTAAGGAAG AGAGGGGATG TCCTCCTTCT TCCTTTCTC CCTGTCACTG  
 257801 CCTGGAAGGA GAATATTTT GCTAGCTTCA TCCTGGACCA TGGAGCCCAG  
 257851 GGCCACACCC AGGGGATGGC AGAATGATGA ACTGAGATGA CCCTGGGTCT  
 257901 CTGACAAGTT AATGGAGGAC ACTATGCCAG CTCTGGATCA CCCGCTCTG  
 257951 TATTCTTTTA CATAAAGACA GCAAACTTA TCATTTGTTT AATCCATTAT  
 258001 GTGGATCGTA CTTGTTACAG AAAATTTAA TTTCACTCAT ACCAAAGAGC  
 258051 TTTTGATTGT AGGAAAGAAA ACAGGAACCT AAACCTTGAG AGAAACCTTA  
 258101 AGAAGGAAGA GAGGGAGTGA AGAACCAGGG GAGGTAGTCA ACCCTGAGAG  
 258151 CCTGAGGCTG GAGGGAAGAT CTGCCCATGC TGTGTGGGCC CTTCTGTCAA  
 258201 CAGCGGGTTC TCATGGGGCT GGACACAGAG GGCAGACTG GGGCCCCAGC  
 258251 GGGCACAGCA GTGCTGGTCC CCAGAAGGGG TTTGTCTCAG TGCTCTAAT

FIGURE 3, page 82 of 188

258301 AACCATCACT CTTGGTAAGT GTATGACACT ATCTCCAAGA ACAGAAAAGAA  
 258351 CATATAGTCC ATCCCATGGG TCTTTTACAG TCACATAGCA GCATGACAAA  
 258401 CAAAGTCCAT CCTATGGGTC CTTTACAGTC ACATGGCAGC CTGACAAACA  
 258451 TAAAGTCCAT CCTATGGGTC CTTTACAGTC GCATGGCAGC ATGACAAACA  
 258501 TAAAGTCCAT CCTATGGGTC CTTTACAGTC GCATGGCAGC ATGACAAACA  
 258551 AAGTCCATCC TATGGGTCCT TTACAGTCGC ATGGCAGCAT GACAAACATA  
 258601 AAGTCCATCC TATGGGTCCT TTACAGTCGC ATGGCAGCCT GACAAACAAA  
 258651 GTCCATCCTA TGGGTCCTTT ACAGTCGCAT GGCAGCATGA CAAACATAAA  
 258701 GTCCATCCTA TGGGACCTTT ACAGTCACAT GGCAGCCTGA CAAACAAAGT  
 258751 CCATCCTATG AGTCCTTTAC AGTCGCATGG CAGCATGACA AACATAAAGT  
 258801 CCATCCTATG GGTCTTTTAC AGTCACATGG CAGCATGACA AAGTCCATCC  
 258851 TTTGGGTCCT TTACAGTCGC ATGGCAGCAT GACAAACATA AAGTCCATCC  
 258901 TATGGGTCCT TTACAGTCGC ATGGCAGCAT GACAAACATA AAGTCCATCC  
 258951 TATGGGTCCT TTACAGTCAC ATGGCAGCAT GACAAACAAA GTCCATCCTA  
 259001 TGGGTCCTTT ACAGTCGCAT GGCAGCATGA CAAACAAAGT CCATCCTATG  
 259051 GGTCTTTTAC AGTCGCATGG CAGCATGACA AACATAAAGT CCATCCTATG  
 259101 GATCCTTTAC AGTCACATGG CAGCATGACA TTTGGAAGTA TTCTGCTGTG  
 259151 CTGGCTGCAC TCTTAGCTTC TTTGGTGCAG TGAGGTTGTG CTTGTGGGT  
 259201 CAATGACTTC TGCACCGCTG GAAGCTCCTC AGAGAGATGG GGCTACAGGG  
 259251 AAGAGGACAC ACGGAGACAC ACACACACAC ACACACACAC ACACACACAC  
 259301 ACACACACAG AGAGAGAGGC TTTCAACAGG GGAGCACCCCT TGCACCTCCAT  
 259351 CTTTTAGCAA TAAAAAGAGT GTTTGGTGTG CTTCCCCCAG GACTACCCAC  
 259401 TGCTCATCTC TGGGTTTGTG GGTCTCACAC ATAGGCAGGG GTCCATATCC  
 259451 CAGCCTTCCC TCTGCAAGA GGACTGAAGT TGTACAAAGA TGTGTTTTAT  
 259501 TTATTTTCAC GAGGACACGG GGTCTGTGTA CTTGAGAGAA CTATTCTGAG  
 259551 ATCTCACTGA ATACGATTAG AAACCACACA AGCCCTGGTG TCAGGACTCT  
 259601 AAGTGGCAGT TATTGAAAAG ATGGTGATGA CTTAGCTGTT TTAATTGGCC  
 259651 TCCATGCAGG AGTACCCTAG TTCTGCTGGT TCAGGCGGGT AGATTTTAAA  
 259701 CCTGGTCTTA TAAGAGCTGC ATTTTCCAGG CAGTTTCTCT GTTCCAGGCT  
 259751 CCATGCTGGG GACTTTCCGT ACACCATCTC ACTTAATCCT CACAGCTACC  
 259801 CAGTGTGGCA AGTTCTATTA GTATCCCAT TTTTCAGATG AGGAAACTGA  
 259851 GGCACAGGTA AGTAGCCAAC AGTCCCTCCA CAAGGAAGCA GAGGTAGCCG  
 259901 GCTATGAGTT CTGAGCAGCT GGACTAGAGA GGCACAGGTT GCGAAGTGGA  
 259951 GGACACACAG CTGAGAGTGG CCCACTCCCG CCCAGTCACC TCCGTGAGCA  
 260001 CTCCTGCCCT TTCTGCCCCT CAGCTCCTGC ACCTGGCCAG ACTTGGGGGC  
 260051 TCTCACAGG TTTGAGCCCC TTTCCCATGG CATCCTGGGA CCCCCACCAA  
 260101 CTCTATGGG GTTATGATCT GCTCCTCCA GGAGAATGGG ATGTAGACTC  
 260151 CCCTTCTAGT GGCTGTCTCT ACTGTTCTCA TCTCCAAATT CCTTTCCCT  
 260201 CTCCCTCCCA GACAAGTGAC TTGATCTCTC ATTGGGAGGG AAAACTAGCT  
 260251 CTGAAATTCC TACACATTCT CCCCAGTGCC TCTGCTTAGA CTCTAACTT  
 260301 TATGGACTCC ATAGCTTTAT TCTTTGCTAT GAAAAGCTAA GATTTTGCAG  
 260351 CTTAGACAT AAATTACCTT TCAAAAGCCT GTTTTCTGCA AATCAAAAGC  
 260401 CTTCAATTTT AGAAAATGGT CTCTGGTATG ATTTTCAAGA GCCAAGAGTT  
 260451 TGATACCTTT ATGCTCTGTG CACCATACTT TTCTCTGAGA CCATAACATT  
 260501 CAGCCTCATG TCTTATTTTA ATGGTGGAAG AACTTAGGAG AAAAAAACAA  
 260551 TTCCTGAAA ATGAAAAACC ACTGGCCATC ATTCTGAAAT ACTATCCTCA  
 260601 CCAAACATG GCTTTGGACA AAAGTGGGCC TCAGTTTCTT TGTCTTTTGA  
 260651 GTGAGGGGCT GGATATGCTA GTCTCTCAGG TTCTTCTTGG CTATGATGCA  
 260701 GGTGCTTTAC ACTTTTTGGG TCTGTTTCTT CATCTCTAAA GTGGAACTA  
 260751 GGTCTATTTA TGGAAATAAA TAAATAGAAA TAATGCAGCT ATAACATACC  
 260801 TGGCTCAGAG TGGGCCATTA ATGAATAGTA AGGGAGGTTT TGTGTTTGT  
 260851 TGTTTTTATT AATCATTTGTC TTATTCAAGG TCCTCTTGAG GACTAAGAAA  
 260901 AGGAAAATAC GTGGTGTTCA TCTGACCTCA AGGGATTGAA AGTCAAGGCT  
 260951 GAGCTCAGTG GCTCATGCCT ATAATCGCAG CACTTTTGAA ATCCAAGGTG  
 261001 GGTGGATCAC TTGAGGTCAG AAATTCGAGA CCAGCCTGGC CAACATGGTG  
 261051 AAACCCCATC TATAACCTTA TCTATACTAA AAATACAAA ATTAACCAGG  
 261101 CATGGTGGCA CACGCCGTG GTCCAGCTA CTCAGGAGGC TGAGGCAGGA  
 261151 GAATCACTTG AACCCAGGAG GCAGAGGTTG CAGTGAGCTG AGATCACACC  
 261201 ACTGCACTCC AGCCTGGGCA ACAGAGACTC TGTATCAAAA AAGTAAAAAT  
 261251 AAAAAAGATT AGAAGTCAAG AGGATTGGGT GGGGTACCT GTACGCTGCC  
 261301 CAGGGAGCAT ACTAACTGA GCCTGCTGTG TGACACACCT CCCGACAGAG  
 261351 GGAGTTCACA CGCAGCCCTC CCAGGGGAAG AGACAGAGAC CTACACAGCC  
 261401 ACAGGCAATG CACACCGGTG TCTACTGCCT GCACTGATCA ACCCATCATG

FIGURE 3, page 83 of 188

261451 CACAATGCAG CGGACAAACG GGGATCGTGA GACATTTTGA GAAAGCCAAG  
 261501 AGCACAAAAG GGAAGAACCA ACAGGAAGGA AAAGAGCAAC TGGCTGTGGG  
 261551 GGATAGGGAA CAAAGGAAAA ATTTTAAAT TTTTAAATCT AATAAAAAAA  
 261601 AACCTTTAGA GGGACTTGAT AAAACATTTC CATAAAAATA GAACAGGTTG  
 261651 TTATGAGAAA GGAAATAGC CCAAGAAGTA TTTCTTGGA ATTAATAATG  
 261701 CAGTCACCAA CATTAAACCT TCCATAGAAG GAGCCGAAGA ATAAGTCAAG  
 261751 GAAGTATCCC ACAACTTAGA TTAAAAGTCA AAGAAATGGA AAAGGCGAGA  
 261801 GAGAACTGA GAAACACAGA TGA CTAGCAA TACCAATATC TAACTAATAT  
 261851 CAACCCAGAA AGAGAGAACA AAGAACTTA AGAGCAGGAA ATTACCAAAG  
 261901 GAATAACAGA AGAAACTCC CCAGAGCTGA GCTAAGATAT AGACCTTCAA  
 261951 AAAGAATGAC CCACTGAGAC AGAAGCAGGG GGGAATGAAA AAAGACCCAC  
 262001 AGTTGTATAG TTGCGTATCC TCTTGATATT TCAGAACATT TAGGATAAAG  
 262051 AGAAGATTCT CAAAGCTTCC AGAGGTAAAA GACAAGTTAT CAACAAAGGA  
 262101 TCAGGAATCA TTGTTGGCAG ATTGGCATTG GCAACACTGG AAGGCAGTGA  
 262151 GGTAAATTGCC TTCACAGTTC TTTTATTTTT ATTTTTTATT TATTTATTAT  
 262201 ACTTTAAGTT CTGGGATACG TGTGCAGAAC GTGCAGGTTT GTTACATACG  
 262251 TGTACATGTG CCATGGTGGT TTGCTGCACC CATCAACCCA TCATCTAGGT  
 262301 TTTAAGCCCG GCGTGCATTA GGTATTTGTT CTAATGCTCT CCTTCCCCTT  
 262351 GCCCCAACCC CCCTGACAGG CCGCAGTGTG TGATATTCCC CTCCCTCTAT  
 262401 CCATGTGTTT CCATTGTTCA ACTCCCACTT ATGAGTAAGA ACATGTGGTG  
 262451 TTTGGTTTTT TGCTCCTGTG TTAGTTTGCT GAGAATGATG GTTTCCGGCT  
 262501 TCATTCATGT CCCTGCAAAG GACATGAAC CATTCTTTTT AATGGCTGCA  
 262551 TAGTATTCCA TGTTGTGTAT GTGCCACATT TCCTTTATCC AGTCTACCGT  
 262601 TGATGGGCTT TTGGATTGGT TCCAAGTCTT TGTTATCGTG AATAGTGGCG  
 262651 CAATAAACAT ACATGTGCAT GTGTCTTTAT AGTAGAATAG GATTTATAGT  
 262701 CCTTTGGGTA TATACCCAGT AATGGGATTG CTGGGTCAA TGGTATTTCT  
 262751 GGTTCAGAT CCTTGAGGAA TCGCCACACT GTCTTTCACA ATGGCTGAAC  
 262801 TAATTTATAC TCCCACCAAC AGTGTA AAAA CGTTCCCTATT TCTTCACATC  
 262851 CTTTCCAGCA TCTGTTTCCT GACTTTTTAA TGATCGCCAT TCTAACTGGT  
 262901 GTAAGATGGT ATCTCATTGT GGTTTTGATT TGCAATTCGT TGATGGCCAG  
 262951 TGATGATGAG CTTTTTTTCA TATGTTTGTT GGCCGGACTC CTTCTTACA  
 263001 CCTTGACAAA AAATTAATTC AAGATGGACT AAAGACTTAA ATGTAAAACC  
 263051 TAAACCGTA AAAACCTAG AAGAAAACCT AGGCAATACC ATTCACGATG  
 263101 TAGGCATGGG CAAAGACTTC ATGACTAAAA CACCAAAAGC AATTACAACA  
 263151 AAAGCCAAAA TAGACAAATG GGATCTAATT AAATAAAGA GCTTCTGCAC  
 263201 AGCAAAAGAA ACTATCATCA GAGTGAACAG GCAACCTACG GAATAGGAGA  
 263251 AAATTTTTGC ATCTACCCA TCTGACAAAG GGCTAATATC CAGAATCTAC  
 263301 AAGGAACCTA AACAAATTTA TAATAGAAAA ACAACCCCAT CTAAAGGTGG  
 263351 GCAAAGGATA TGAACAGACA CTTGCCTTCA CATTCTTAAG GGCAAACAAT  
 263401 TTTGTACCTA GACTTCTATA CCAAATAAAA ACATTTTCAG TATACAAGAA  
 263451 ATGAGATTTC TTGTATATCT TTCTGATTTA AAAAGTGGGG GCCCTGTAGT  
 263501 ACCAGCTACT TGGGAGGCTG AGGCAGGAGA ATGGCGTGAA CCCGGGAGGC  
 263551 GGAGCTTGCA GTGAGTGGAG ATCGTTCCAC TGCCTCCAG CCTGGGAGAC  
 263601 AGAGCGAGAC TCCGTCTCAA AAAAAAAAAA AAAAAAGTGG GGGCATGGAG  
 263651 GGTGAGGAGT GTAATCCAGC AAGACAGAAA AGGAACCTAG AAAGAAGAAG  
 263701 AGCTGGTCCA AGAAACAGAA GAGCTAAGCC AGGTATCCAG TGAAACAAAA  
 263751 CCCCGGCAGG ACTTGTGGGA CAACTGTGTA AGAAACCTGG GAGAGAAATCC  
 263801 ATTCACGTTA GAACAGAAAG TCAGAAGGTT CTGAAAAGCA AGTCTTCAAG  
 263851 AAGAAAGTTA ATTCCATTGA AAAAAATAA GATGAAGAAA CTGGAAGACC  
 263901 TCAGAGATAT GATGAAGAAT ACGTATGTGC TATCCCTCAA TAAATTTTTT  
 263951 AAGGCAGTTA AAAATTCTGG AGAAGGCAAA TTGCTAAACC AGAAAGACAT  
 264001 CATAAAAATAT TAAGCAAACCT AAAATATGTC ACGATTTTGA GCAATTAAAG  
 264051 GAAGATGAAG AAAGAGACA ATTTAACTAT GAAGCTTAAA ATAATCTCCT  
 264101 TCAAACAGCA CAGGTGAGTC ACCTGGGCTG ACATCTCCCC TGCCGTGAGG  
 264151 TTCCTGTAT CTTTCTGCCA TGGATGAGGG TTACATCATC AGAATGTTGA  
 264201 TAATGTTCTT TATTCATTTT CACTTTTAGA GTCAATGAAT AGAACTTAC  
 264251 ACTTATTACT TATAGTTACA GAATGTAATG AGGTAAAAAT TAATGTTTAA  
 264301 GACTGTATAA GTAACAGGGA AGGATCAGGG AATTGATTTT TTCCATAGTG  
 264351 AAGGGGCAAG AAAGGTGTTT AATTTGTCCA ATTGTATTAT TTGCAGTTT  
 264401 TGTTTTTTAT GGTATGCATA TTTTGCTTTT AAAAAATTTT AAGAAAGTGG  
 264451 TGCCATATTA AATATCTGAA GGTGTTTCAC AGGCTGTCTC AGGCCTATAA  
 264501 GAATTCACCTG CCTTTTCTGT TCTGTGCCTT TACTATATT TTTATTTATT  
 264551 TGCCATTCTT CAAAGATTGC AATTTTAAAT TGCTCAATAT ATTTTCTCAG

FIGURE 3, page 84 of 188

264601 TTGAAAATAT CAATGTATTT ATGTAATGAA AATGCCAATA TGTGTGTATA  
 264651 TATCTGGAAT TAGCATAGAA ATGATTAAAG CAGTTCAGCG TTGATCAATA  
 264701 ATCGTATTTG ATTTGGGATT TTTACTTTGT TTCCCTCGAC CATCCTGTGC  
 264751 TTTGATATTT ATTACCACCC ACTGAGATTG TGGCCTCAAC TAAATAGAAC  
 264801 TTGCTTAAGG AAATTCAAAA TCTAGCAATT GAATTCAAAGT GGTGTGCTC  
 264851 ACAGAATGAC AATACAGAAT TAGGACTTGC AGAGTAAACA GAAACCCAGT  
 264901 AGATGGGAAC TGCACCCTTG ATAAAATGTC TCTTACTGCC TTGAATACAA  
 264951 CCAAACATCA CCAAACCACA GCCCCCGCT ATAAAAAACT TTTTTTCAAT  
 265001 TATAAGGTCA GAGTCTTCTT TCAACTGCGC TAAGCAGTTT GACCAAAACG  
 265051 TGTATTTCTG ATATGTGTGG TTTTGGAAGA CCTAAGATTG TCAAGCCCCA  
 265101 GGGTTTCAGAA GGATGCCGCA GTGTTTGAAG AAGTCCTCTG TATTCACGT  
 265151 TCTGTATGAA GCTGCCAAGT TGCTCAGGTG TTCCCAGGAA CAGAGAGGTG  
 265201 GCCGTGGGCC AGCCTCCCAG GGAGCCCAGA TGCTGGCTGC AGGCTGTCTC  
 265251 CACACCCGTG CTGAGTGTCC AGCCAGCCA AGGTATGTCT GCTTCTGTGTT  
 265301 GGCACCGCTA GTGGCCCTAA GGAGACATTT CACATCAGAG CTAGCGTCAA  
 265351 CCCTCCCTCT GTCCTCCTCA CAGAGGACTC AGAACTTTCT CTCTTCTTCC  
 265401 AGATTGTCTA AGGGAATCCG CACCCTGCTT TACCTCTTGC TAACTGAAAT  
 265451 AAAAAAGTTT TCCAGGACAA GTGGCCTGAG CCCTGTGTAT GATGCACAAT  
 265501 AATCACCCGT GCGACAAGAG CATCCTTCAT CTCGATGGGC CGGCAGGGGT  
 265551 GGTCCTGGC CTGCTTCTAG GAAGAAGGAA AGGCCTCAAC TCCCACAGTC  
 265601 ATTAGGACAA TCACAGGCAG GTGGGTTTTT TAGAGATGGT GAGAAGCAGC  
 265651 TCCCTTATG GTATAAGGAT CCGTGAGCAA TCAGAAACCA GGGTATTCTG  
 265701 GGAGATTATT GGAAAGGCAT ACTCTGGGTA CCATGGGTTC TATGGCTGCC  
 265751 ATGTGCAAA ACACACAGCG TGAAGGCAAA CGACCAAGGG GGTATGCACA  
 265801 AATCGATGTG GCCTTGTTAG GGGTCTGAGA ATCACTGGTC ATTCTTTTTT  
 265851 TCTTTTTCCC AAGTTTTCTC ATAGTCCCCA TGAAAGGGGA ATGTTTAGGG  
 265901 TTACAATGTT AATTTGCTTT TAACTGACAT TTGCCCTGTG TCTGGGGTGT  
 265951 CTCTGCTCAG CTCACCTGCA GCATCTGATT CAGGCTGGAC GTCCATAGTA  
 266001 GGCCCTCCAG AAAGACTCAT GGGACACACA GCCCTGGCCA GAGCAGACAG  
 266051 GCAGAGGCCG ACTCCAAATG TTCCTCCTTC ATCAGGTGTT GGGGTAAG  
 266101 CGCTGTGGAT GAGCAGGTTG ACAGCTTGCC TCCTCACTGC AGTGCTGTAA  
 266151 GTAGAAGATG AATGGTGCTG CTTGTTTACA GATAATTGAC ACAGGATTTT  
 266201 TCCACTTCCT TGCTTTGGCA GAGGCACAGT TTTGTTTTCT TTGACTCCAA  
 266251 GCTAAATTT CCCCTGCCCC TTCTCTGCAA CCTGCCCCTG GTGCCCTCTA  
 266301 AGCCCCCTCA TGGTGTGAG CAGCCTGACC CCACAGCTTC TCCTCCTACC  
 266351 TCTGCCGCCT CTCTCTGCAG CCACATGGGG GTCCAGCGCC TGTTTCCCTC  
 266401 CTGCCAATCC TGCCATTCCC TGAACCTCAA GCGACCTCAC CACAGACCTT  
 266451 CAGTGCCCCC TCCTGTCAAC AGGAAGGCTC TCCTTCCAGC TCCCTTTTCT  
 266501 GCCACTCGTC TGCCTGATTC CCTGTCCATT CCTGGGGCCT CTGTGGACCC  
 266551 CACCCTGTGT GGGGTCTGTG CGAGTTGCCA GAGCCAGTGA GGAGATGGCT  
 266601 CTAGCCTCAG AGAAATCACA CAGGAAGCCC TGAGTGCCTG GGAGACAGTG  
 266651 CTGGAGCAGG TACTAGGCCT GGTGGCAAAG CTACTAGCTC TCTTATAGGC  
 266701 TGGAGAGGTG GGGGTGACT GTCATACATT GGAGGGCCAC AGCTACATCA  
 266751 ATAAGATACT GTTAGTGTC TTGCATCATG GATGACAGAA TTAAGGTTCA  
 266801 GAGAGGGTAA GTGACTTACC AGAGGTCACA TAGCTTATAA GTGGCACATT  
 266851 CAAGGTTGAC ACCTAGGGTT TCCTAAAGGA AGAATTCTTC AAGGTGGGCC  
 266901 TGGCAGGACA TATGGGATAT GGAGAAGCAG AGAGCGGGGG CTGGAGAGAA  
 266951 TGGCACAGAG AGGTGACAGG CCCTGGAGTT AGAACAGAGG TGTTGGTAGG  
 267001 TGGCTGTGCT CCCTTGGCAA AAGAGCACCA GACAGAGAGG GGGAAGGGTT  
 267051 CCTGTCTGAG AGGTCTCCAC CGGCCTGTCC CTCATCCTCT GCTGCTTCCT  
 267101 TCACATGCAC TCACACAGGG GCTTGGTGGG AATTCTTAGG ACCACGTGCA  
 267151 AGGGAAATGC CAGGAGAAGC CGTGTCTTGG GGTATGAGAG CCAGCCGCTG  
 267201 AGCCCAACTC ACCTCCTGTG GGAAGCCACC TCATGGTTAG GGAGTCACCT  
 267251 TGACCTTGTG TGAGACCTTA ACTAGTTAAT GTGCATGTGT TTGAATTCCT  
 267301 GCACATATTT TTTATGTTT AATTCTTGCA CACGTTTTTT TTTTTTACTT  
 267351 TCCCCTAAGT AAAAAAATA AAAAAAATA GTGAGCAGGA ACTCAAACAT  
 267401 ATTCACGTTA ACTAGTAAAG TTAATGTGAA CTCTCTCCTG AGCTCTTAGT  
 267451 TTCGAAGGGA GGTCTATGCT GCACAAGTCG TCTAAGGAAC ACTGTCTTTA  
 267501 GAGCCTGGTC TCTCCCTGCT GTGTGATGCG AATGAGAGTG GGCTGGCGGC  
 267551 CCCTGCTGTG GGCAGTGA CTGGAGCGCC CTCAGGCACC CCGCACCTGG  
 267601 GCCTTGGGGT GGTTTTGAAG CCTAGCTATG CATCCACTTA CCCTAAAGC  
 267651 TTTTGACAAT AGAGGGCCAG GCACTGTCTC AGGAGGCTCT CTTCTAGCTG  
 267701 TCTCGGGGGC AGCCTGCTCA TTTTGTGTA GTTATCTGAG TGAATTATTT

FIGURE 3, page 85 of 188

267751 TATTCCTTTT. TATGTCCTGA GCAAACCCAC ATCCTCATTT TATTAGTGTA  
 267801 TTTCCAATTA TTGCATAATG ATTTCCAGTT TAGCTTGGTC TGTGATATGA  
 267851 GGACACTTAA TCAAATATCT GTACGATAGG CCTTTAAGTT CTCTAGGGCC  
 267901 AGAAGTTTTT CCATCAATTA AGCTTCAAAG AAATGGGTTT TAGGCTCATC  
 267951 TGCAACTGTG TTTTTGTGTT TCTTTTATGG CCTTCCTGCC TTCTCCTGGT  
 268001 GGCTTTTAGAG ATACCAGGAA ATGTGACGTG GGAATAAGGT ATTTATTAGT  
 268051 GGGTGTGCAG AGAATGGGTT TATAATGGTT ATTACAACAT TTTGAAGTGG  
 268101 CTGCCTTGAA GCAGGACAAAT TTATGTTTCC ATTACAGTCA CCTTATGAGC  
 268151 ACCCCACACA CACAGTTCTG CCAGGAGGGG ACATCTACCC TGGATCCTGT  
 268201 GGACTCCCTG GGATCAAACC CCTGGAGGTT TCCTCTGGAG AGAGATTGAC  
 268251 CCCCAGAACC TTCCACACAC CCCACACTCA CCCCATGCCT CAGAGGGATG  
 268301 AAAATCTGAC CACTAAAATT CAAAGAGTAT TTCTCTGCCA TCCGGGGTGC  
 268351 TCCTCCCTCG GAGCCAGGCC AGGCAAGGTG CCATTCTGGG CCTTGACTCC  
 268401 TATAGCAATT ACAGGACAGA GGTTATCAGC CCCATTTGAC AGATGAGGAA  
 268451 ATGAGGCCCA GGGAGAGAAG CCCTGGGCTT CCAGCAAGCA AGCAAGTGGG  
 268501 TGCTGCTCTG CTCTGAGACT CCCCATGCCT GGAACACGAG TGTGGGGGGA  
 268551 AACAGCACCC CAGCCCTCC GGCCTATCCT GTGAGCACTC ATGCAGGGAA  
 268601 ATAAGAGCAA AAGAGAGAAC TGGGAGGATT CTCAAACCAC AGTGACTCCA  
 268651 ATCCCCATAC TTTTTCACAC TGAGTGGAGC TCCCTTCCCC ATCTCTGAAG  
 268701 AGGAGAACAG ACCCCAGGTC ATCAAGCCTG GTCCTAGCCA GGGGCAGAGC  
 268751 TCTCAGCTAG AGCACCTCGC ACTTGGATTT ATTTGTCATG GTTCTCTTTC  
 268801 TGCTCTCACC TAGGCAAAGG GGTTGGATTT CACTGGAGGA AAGTTCCAGA  
 268851 GGAAGCAAAA GGGAAAGCCT GTGAGCATGG AGTATTCTTG TTCAGTTTAC  
 268901 CAAGGGCTGT TCCTATGGCA GCCTGGACTC AGGGTCAAAG GAAACTTAGA  
 268951 GGCCATGCAT GTCTCAGTAG AAGCAACTCT GGACAAAGCC ATGTGTTTCGT  
 269001 TCCTTTGTTT ATCTGGCACA TGTTTGTGTA GTGCTAGTTG TATGCCAGGA  
 269051 CCCCATTGG CTCATGTCGA TGGTGGGAGG GACATGTGGA CAAGTAGAGG  
 269101 AAGCAGAGAT GATCGATGTT CTGAGGGGGT GTCCAGGGCT CTCAGAATAC  
 269151 ACAGGAGACT GAACCCAGCC AGGAGTGGTC AGGATAGTGA CATGCAGGAA  
 269201 AGCCACGTGC CAGCTAAGAC CCAAAGCCCT CCACCCCTCC CTCCCTGAGA  
 269251 GCAGGCCTGT GCCAGTTGC CAGAGGTGTC CTATTCTTGC TCCCTATTCA  
 269301 GGGTTGCACT ACCATGATAG GGCAAAGCAG TCATCATTCC ATCAGTGACC  
 269351 ACGTGTCTTG AGCAGATGCT GCAAGCCAGC CCTCTGCACA GCCCCACCGA  
 269401 TCTGAAGAGG CTTGGAAAGG GCGGGGGGCA AGATTCTAGC TGTGGTGTG  
 269451 TAGCCCCAAG GTGATGGTAG GCATGTTTAA GGAAGTGAAG TGGCGCAGGG  
 269501 TCGCCAGAAC GGGTGTGTGA GTGGGGAAGG ATGAGGCTGG AGACATAACA  
 269551 GGGCAAGTCA GGGAGGCGC TGCCTGGCTC CAGCCCGAAG GCAGTGGGAG  
 269601 CCCCATAAG ATTCTCCAG CTAAGTGTG GGGGAGGATT GGTGGGGACA  
 269651 TGATCGGAGG CATAGTGGTC ATCCGGGGGT GTTAATGGCT TCCTGAACCTA  
 269701 CAGCAGAGGT GGTAGGAGTG GTGGGAAACT GGCACCCTAA GAGACACAGT  
 269751 GGTAGAAATG ACCTGAGCCA GGAAGTATTG GCTGGGGATG GGCAAGATGG  
 269801 TGAGGTAGTG CCAGGTGTGC GATTTGGGAA GCAGGGGGCT TGGGTGGAGG  
 269851 GGTGTCTGGC TGAGGCTGGG ATGTGAAAGA AGGAGCAGTC TTGATGGTGA  
 269901 GTTCCATTTG GGCCATGTTG AGTTGAGGGG CCTGTGGGAC AATGTGGGGA  
 269951 AATGTCAAGC CAACAGTGGG GTGGGACATC AGGAGCTCAA GAGAGGATAG  
 270001 TGGATACTGG GCTGGATAGT GAGTAGACAC CGCTCCAAGC TTCCCCTGCA  
 270051 CCAGCCTCGA TTGAGGGAAC CGAGTATCCA TGGGGGAGCA GAGGGAAGTT  
 270101 TCTGTATAGC TTATGCCACT CCACGTCCCA AAGAACCACA GCTTCTGGGA  
 270151 ACCTAGAAAA GCATGGGGCA GGAGAAGCAG CCAAATACTC TCAGCAACGA  
 270201 CCACCTTTAA AAGGGCCTGA GAACACCAGG GTGGGAAGAT GGAGCATGGT  
 270251 GGAGGCCAGT TCCATGGCCA CTCTTGTGTT CTCCCGCAGG AGCCAGTCCA  
 270301 GAGTGTGCAC TGGCATAAAT GGGTCAGCAC ACCCCACCAG GGCCTCTAAG  
 270351 CATGGAGCAG ACAGGAATAG GGGCACACAC CCGGGGGGTC ATCAGGGCCA  
 270401 GGGCCAGTGA GTGACCCGAG TCATCTAGAA ACATGACTCA ATCGACATTT  
 270451 ACACCTGCCA ATCAGACATC TCCCCATGGG TGACCTGGGA GACCTATGTG  
 270501 CACACCAAGG ACCCAGAGAG TTAAGCTCAC ACTCGGATAC ATCCTGTGAT  
 270551 GGAAAGACAC CCGTGGAGCT CTCCTGCCAG AAGCCCTCCG CACGCATACT  
 270601 CACCACCAA ACCCCCTCAT CTAAGGCCAC ACAATTTTAA GTGATCTGTA  
 270651 GGCAAGAACC ATGACTGTCT TCACATTTGA TCTCCATTTT TTCAAACAGT  
 270701 ATCCTATCCT CCAAATGCT CACTACCTAG CGCCTTAAAA GTCAAATCAA  
 270751 CTCCACTGAG TTGGCTCACT TTTTAAAAGA TGCTTCTCCA GCTCTTATGT  
 270801 TTGCTTTCTG ATGGAGGGGA CAACTAGCCT TAGCTACTTG GAGCATGTTG  
 270851 AAAGCTCTGA GTGGTGTGCA GCATCGACTC TGTAACATCC AGCCTGAAAC

FIGURE 3, page 86 of 188

270901 TTGGAGGCAT AAGCTGGGAA AATGTCCTAA GACATGGGTG GCATTTCAAA  
 270951 TGTAATTATT GCTGGTATTC CCATTTGGCA GCCCAGCTTT CAAGCCAGCC  
 271001 AACTCCCTCA TTTTATATTT ACTTTTAGTC CCACACTATT TTCTGTGATC  
 271051 CATTAGCTCT AGGAAGTCAT TTAAAAGCTA TAATCACGGC GCTTGTCTCA  
 271101 GGTGGATGCA ATCCAGATAA ATGGACCCAG ATCCACTCCT CGAAGAAGCC  
 271151 TCGGGCTCCA ATTACAGCGT AATGCACCCC AATTAAACAA GCAGAGCCAG  
 271201 CTGCCCCGTG GAGTTCTACC TCATCTGCAT TTAAAAACTA GGGAAAGTGT  
 271251 GGGCAAGAGT CCGTTGCAGA GGACGCTTAA CAGCCCGCTT CCTAGTTGGA  
 271301 AAATGTACCT TTGGCCTTGC ATTTGGGTCA CAGGTGCAAG AAGCCCCCAC  
 271351 CTAGAATGCA ATCATGATGT CCCTCAATGG TTTGCCTCAT CATCCTGGTG  
 271401 CACGCTGTCT AGAAGTAAGC TTGCCACCA CAGCCCCATG CTGGTGCAAG  
 271451 GGCAGGTTGG GGGCTCTGGG CCTTACCGGA GAGGACGATA TCCCAAATCG  
 271501 AGCACTGTGG GCCTGCAGCC CGCCATCCCC GAACACAGGC CTGTGCCCAG  
 271551 TTGCCAGAGG TGTCCCGTTC CCGAGACAGG GGTGTGTTGC TGTGATAGGG  
 271601 CAAATCATTC ATCATTCAT TAGTGGTCAC AGGTCTTGAG CACATACTGC  
 271651 GAGCCCTCCA TCCCCATGGA TCTGGAGAGG CCTGGGAAGG GGTGGACACA  
 271701 GCCCCTGCCC CGGGGTACAC AGTGTGGTCA TGGAAATGGT GCTCACTCTC  
 271751 CTCAAGCAT AGTAGCTACA TGCCTAGAAG GGCTCAAGGG AGACAAGCAC  
 271801 AGGCTGGGGA ATCAGAAAAG GCCCCAGGGA GGATGAAGGA CCTGGCTGGC  
 271851 TCAATAGAAA GACAGGCACA CAGGGTCAGG CCTGCAGGGA ACCATGGGAC  
 271901 AGAACTGGCT GTAGGGTTGT TTAGATGGAG TGGGCAGGAG GATGTGTTGA  
 271951 AGAAGATGTG GGGGCCCTGA TGACAAGTCT AGGCAGTGAC TTCATCAGTC  
 272001 AGCCTCTCAC CCCTGCCCTG GGTCATGGG GGCAGGGAAT AAAATCCGTA  
 272051 CCATCCTTTT CACCCCTCC TTAACAGAAG AGCATTCACA CAGCTCTCAG  
 272101 CACTCAACGC TGACTGCAGA GCGGCTGTG GTCAGGAGAG GGGAGCAGGA  
 272151 TGGGAGAGAG ACAGCCAGAA GGAAGTCGC TCAGCCAGCT GTGCCACAT  
 272201 CTTCTCATGT CCTGGGGCAT GGGCTTCTGG AGAGCAGGGC TCGAGCCTCG  
 272251 CCCCCTTCTC CACCCACTTC ACACCTCAGC GTAGTGGAAG GCAGGGTGGG  
 272301 GTCAGTGCTT GTTTGTTGAG TGATGAGGAC TGTTCAGGGC TGGCTGTGCT  
 272351 CATTCCCCAC CCCACCCTTG CCTCCTCCCC GAGCTGGACA GCCCAGCTTT  
 272401 GCTGGGGAGG ATGCGGCAAG GGTCAAGGAC AGTTCCAGGG CCTCAAAATG  
 272451 ATGAGGGCTG CTGTCCCGTG GTTATGGTTT GGAGCTCTTC ACCTTGTGCC  
 272501 TATTTGGTCT ATGTTCAATC TGGGATCTAG AGTTACAGTA AGTCCCGGTA  
 272551 GTAATTCACA TGCTCATGAA TTCACAGAGC AGGGTAAGCT ATGGGTTGCC  
 272601 TATCTCTGCC AAGCCAGATA TTTGGAATGG TTATAAATAT CTCCCCTGT  
 272651 CAAGTAGAGG TCCCTCTGCT CCCTCAATGC AAACCACATA GCTTGGGATC  
 272701 CATTAGTTCA TTCAAATAA TTAAGAAGCA CCCCTCATGG GTGTGGTGGG  
 272751 TATAATAATT TACAAGGCAA AACTCTTCCT GTCCCAAGGA TCCCAGTGTT  
 272801 GGTGCATCAG GGCCCATCTT CTTGGTGGGC ATCACACTGC ATGCTGGAGG  
 272851 AAGAATCAGC TTTATAGGGC AGTTAATGTT GAAAGTCAAG TGCAGAATTT  
 272901 GGACTCTGAT TGCCACCCCC CCCAAGAAAG GGGAGGGGAG AGCTGTTTCA  
 272951 GGAAGGCTTT CTAGAAAAAA AAAGAAATG AAGCTGTCCC CAGGGGACAG  
 273001 TTTAGGGGTT GATAGGGGGA CATTTCAGGT AGAGGAGGCC AACCATGCAA  
 273051 GGCCTGGAGG GAGGAGGCT GGGCCTGTCC GGGGGTGGCT TGCTGGCCAG  
 273101 TCAGGCATGA CTGGACCATG AGGGGAAGGG GCAGAAAAGT CCATCTTGAT  
 273151 TCCTCCTGGG CAGGAGACCC TTGACGTCTC TTTTGTGTG ACGTGAGCTG  
 273201 AACAGCCAGG GCCGTGAAGG TCGAGTCCCA GCCGTGCCTG AGTCCATACT  
 273251 TCAGTCCTCA AACCCTTGAG AAGCCTAGGA GGGGAGAGCA GGGCAGACGA  
 273301 GGCCAGGGCA TGGCCTGTGA GAGGCTCCTC AGGCCTTACA CATTGGCCCT  
 273351 GTGTGCTCAG AGGTCTCCAA GGAGGCCAG TTTTATGTCA GGGCCCATGA  
 273401 CAAACCTTCA CCAAGAACAG ACTAAGTGA CACCTGCCTC CATACCGATA  
 273451 CCTCTGAGCC AGGAGCCACG GCCAGCCACG CCTTCAACAT GAGGAGGTGG  
 273501 TGCCGTGTCA GCACAGACCG CCAGGTGTTT CGGGAGCCTT GCTCACAGTG  
 273551 TTTGTGTAGG ACACCCCAAG GTGTCTTAGC TCCTGGACTA AGCCTCCTTT  
 273601 AGATACCTCT GGGAGCTGAG TATTGGGTGA GGCCAGGACG CCCTGGGGCA  
 273651 GTGGGGATCC CCTGACTCTT AGGCCTTGTA TTCTTCTCCT AAGGCTGCTT  
 273701 GGCAAAACCC ACACCCCAAG CCAGCCTCCT CCCCAGAGAG CCCAGGCCCTC  
 273751 CTGGCAGCCC TGGGTTGAAG GGATGCCAG CCCAGGATGG CAGAGTCTCA  
 273801 GGGACCAGAT GAGCTGCCGC CACTTCCATA TCAGTGACCC TCTCCTGTGA  
 273851 GCCCCGCACC TTCCCACCCC TCCCCATGT ACCTAGGCCT GGGCTTGGCT  
 273901 GAGGACAAAT ACTGTCTACT CAAAGCAACT GCTGTCTTTC AGACATATTG  
 273951 AGAAACATCA GGTTACCTTT TTTAAATAAA CATATCATTG AAGCATAACA  
 274001 CAGAGAGAAA ATGAATAAGT CATAAGTGTA TAGCTCAGTG AACTTCCACA

FIGURE 3, page 87 of 188

274051 GAGAACATAT CTGCGTAACC AGCACCCAGA TCAAAAGACA GAATCTTACC  
274101 AGTGCCACAGA CGCACCCAC ACCATGCTET ATTCCAGTGT GACCCACCCA  
274151 AGCATACCCA CTACTCAGGT GGCCTTTTGA AAGAGGAGAG GGCATGACTG  
274201 TGACAAAGCA GAAGGGTGGC TAACACCAGC ACTGCCACTT AGAGGGGTGC  
274251 CCAGGTAGAG GGGAAACAGG GAAGAGAGCA GAGGCCATGA GGTAAAGAAA  
274301 AGCTTCATGT GAGTGTGGAA GAGAACGACC CAGTGAGCGT GGCAGGACCC  
274351 TCGCCAACTG TGA CTGCTGGAAG CTGCATGTAG AACTTGAAGC AATCACCTAG  
274401 GAACTTGTCG TCATGGTAAT GGATTCAGAT GCTTTATCAG TTTGGAAGTC  
274451 GGCTGCAATA TCAGTTTGGG ACTCGAACCA TTTCTAGACT CTACGCCCAA  
274501 AGGAAGACAG ACTTTTGAGT GGAAGCGATA CAAATTACCT GTGGAGCAGA  
274551 AAACAAAGAT TCCTGTTGGC ACTCAGGCTT CCTCTGCTC TAGGTGAGAC  
274601 CTCGGGACCT GGTGCGGGCC TGGCCCTTCC AATGCGCTCAG AGGTCAGACA  
274651 TGGGGCATTG AAGGGCCCTC TTGGCTCAGG CTGGGGTCCA GCTCACTCTG  
274701 CCCTTCCCAA GAGCAGCTGT ACTCATGGCT CTGTGTCTGA GGGCCCTGAA  
274751 GAACATCCTG CAACATAGGA TCTTCCAGA TTCTCTTCC CTCAGTCTC  
274801 AGACACTACC CTCTGCCTGA TGCAGGAGGC CCTGCGCAGT GCAGGTGAGC  
274851 CTCTGCCTGA CGTGGAGATG CCCTCGCTGG GTGTGACTCT GCTTGCTCCA  
274901 AAGGGTACCT TGCTCTGGGA ATCGGCTACA GGTCATTCTT GTCAGTTAAA  
274951 AGACCTGGAA ATCCCATCTT TGTGTTCCCT ACATTCTCA GCCCTGGATG  
275001 AGATAGATGA CCAGCCCAGA CGTCTGGATT TCTGAGCCAC AGCTGTGGGC  
275051 AGTAAAGGC AGGATGTGCC AGTGTGTTAG TGACAATAAG ATTTGCCAG  
275101 TAAGGGGCCC CTATGCCTGG GCAGGGTTTC AACGTGGTCC TTGTGCTATA  
275151 GAGATTCTTG TCCTCTCCCA TCACAGTTAG AGCTGGAAGC CTGGAAGCAG  
275201 GAGAGAAAGG AGGTGGAGAT GGGCAGAAAA ACAAAACAAG AATGTGGGGC  
275251 ACAAAAGGAC AGGCAGGCAA CGGCCTGGCT GCATCGCCAT TGCCCGGGGC  
275301 CCCAGGCCTC TCACTGTTCC TTGGCCTCAG TTTCTAATC AATAAATGAG  
275351 GAGCCTGGAC TACATCATT CAAAACCTTT ATCCCTGCTC CTGGGCACTA  
275401 TGACCTGGGA TTTGTGATGG GCCAGCTGCA TAGGAGCCTC CAAGAGGCAA  
275451 ACAGGGTGCA GGATGGGGCT GGGGCTGAGC TGCCGCCACA TGTGCAGTGT  
275501 CACTGGGATG CACACCCAGA TCCACAGCTG TGTGTGAGAG TGTGAGTGAG  
275551 TGTGTGTGTA TGTGTGTGCA TGAGAGAGAG ACAGACAGAG AGAGAGAGAC  
275601 AGAGAGAGAG AGGCACCTG CACGTGCAAG GACCTATTCT CCAGTGTCTT  
275651 CTCTGCACCT GAGCCTATAC TGGGTGCCAT GAGCCTCCAA AAGAAATGAA  
275701 AGAGTTTCTC ACCCCAGCCT TGTGAAACTC TTACCAGAGT GTTATCTCA  
275751 CCAAACACAG AGCACCATTG GTGGTAAAAA CAAAATGGA GGTGAGAGTG  
275801 TGATTGGCTT ATTTAGCTGA TGGCTCCTGT TTTTATTAGG AGCCATGACA  
275851 TCATCAAGTG GCATTTCTTG AGCCTCACTT ACCAGATGAT TTCTCAGTAT  
275901 TTGCCCTTCT GCTTGGAAAG TTCTTTATGA ATATTTTAA CACATTTTCA  
275951 AAGCATAAGT CAGAAGACAG GTTAACACAT TCTGAAGCAA AACATGCTAA  
276001 TTCTGTGACA CGTGATCTGC ACCATATCCA CAGGGACACA GGTGCATAGG  
276051 GCTCCTGCTG GGATCTCAGA TGGGAAGACC CTCAGGCTGC AGGCCACTGG  
276101 CTCCGCCCTC CCGGCCCCAG GTGTTCTCTG AGCTGTGTAC ACTTTTCTTT  
276151 GGAGAATCCA AGAGGGTCCC TGTCACCTCC ATCAACTGTG GATCCTGAAC  
276201 CTCTCAAAGC ATCTGAATCC ATTACCATGA CAGACAAGGC AGCCAGGAGG  
276251 CCATTCTCAG GCTCTGGGAA CTGATAAATA TGGAGGCAGA GAGCAGGCTG  
276301 GAGTCATTGC GCAGTGTGTG AGTCTAGTGA GAGCCAGCAC ATCTGCCAAA  
276351 TCCCATCAGG CTGCTGCTTT CGCTCCTTTC CCGGTGTTCA GGGAGTGAGC  
276401 AGTGCAGATG CATTATGGCT GAGATGTGTC TGGAATCAA CTCCATCGCT  
276451 GGAAGAGGAG GGCTTTCTGA GCGCTCGGAG GACCCACACC TGGTTTGCTG  
276501 TTTATCCCCA CTGCCAACCC TCCCTCGGCA GCCCGGCTT CTCACACTGC  
276551 CAGGCCCTGC ATTCTGGATG TGAGCTGAGA CCACAGCCTG CGCATCAGCT  
276601 CAGAAGCTTC AGTTTGA AAA ACCACACGT TCCGCTGCG ACCGACTTTC  
276651 ACAGAAATGA GGGTTTCTGC AGCTCCCTCC ACGGGCTGCC CACATTTTGA  
276701 TAAGTTTCCC GTGTAGATAA TCCTCAGAAC AGCAGTGCAG GTGACGGGGA  
276751 AGGAGAGCCT TCTCACTCTC CTCCCAGAGG CTCAAGCCCT GGAAATATCT  
276801 CAAAGATCTC CCGAAATGGC TGGTGTTCGC TTTCAGAGTT GTGGAGTTT  
276851 GTTTTATTTT GACCAGGGAT TTA CTGTCAAG TCGTTCAAGT CCGAGAGGTT  
276901 AAGATAAATC TTCAAACCTC AGGAAATTC TCTGAGCCGT CTCAGGTCTA  
276951 AAACCCCTCTG TTTGGGTCAT TCTTCTCTGA AATGCCATTT CCTGCCAAGC  
277001 TCATGTAAGA GCACGTATCG CCGGCTTATA GCAGACCCGT TTTCTGAGAG  
277051 CATTCTGAGG CAGTTTCCCT GTAACACCTT TTCTTCTAAA GTAAATGACC  
277101 CCAGGAGCCC CTTCCGCAGG TGAATGTGGA ATGTGTTAAC ATTTGGGGAG  
277151 TTCCTTCTCTG GAGACTGCAG TTCAATGGCA TTGATTGCA GTCCAGGCAC

FIGURE 3, page 88 of 188



277201 CCCTCACATC AGAGGACCAG AATCTCTGCT TGTGTCTTG AAAACCCAGT  
277251 GACTCTTTGG CTTGGCTCAG AAGCTGAAGA TCAACACAGA GGAGAGAAAA  
277301 ACACCATGAG CTGCCAGGCC TGTGAGACGC CCGCTCAGAA ACTGCTACTG  
277351 CCCAGTCTC CCCACCTGTT ATTTACAGGC ACACCTGCCC TGCCTGGGGG  
277401 TGTCTTGGGA GAACAGAGAC AGGAGAGAGC CCAGTTCTGG AGAAGGCCCT  
277451 GCCGGGACCT ATGCGGGGCT GCTTTCCCTC TCAGCGGGGC TTGCTGTCTC  
277501 TACCCACAGT CACAGAGGTG ATGCCTCTTC CTCTGGGGCT GCTGTGGGCT  
277551 GCCTTCCTAG AGGCCAGGAG CCTCCATGGC CCCCAGGCAT GACCTGAAT  
277601 CCCCTGCCCC CCGTGTCTTG ACCATGCTGG CAGAGCTTGC ACACAGGTGC  
277651 ACGTGTGTCC ACAGCATAAC CACAGGGACA CACTCACACT TCAGCACATA  
277701 TGCACACACA GGCATACTCC CACACTGTTT CCGCTGTTCT TTAAAAATCA  
277751 CAGTACCTGG GAGTGTGAAA AGAAGTAAGG CCACAGATTT GGGTTGCTCT  
277801 TGTAATCAC TTGTCTTTAC CCCCTGTCAG ACCTAAAGCC ACCTTTTTAT  
277851 AGCAAATCTT TTGTAAAGCC CCCCTTTATT ATCTTGAAAT GGATACATGT  
277901 CATCAAATAT GACATATATT TGATATGAGG GATATATCTA AGTCTATCC  
277951 CATATATGTG TGGTGTATTA TTCTTTGGAT ATTTGTACCC TGAAATCTCA  
278001 TGTGAAATG CAATCCCCAG TGTGGAGGT GGGGCCTGGT AGGAGGTGAT  
278051 TGGATCATGG GGGTGGGATT CTCATGAATG GCTTGGCACC ATCCCTCACC  
278101 GGCTGTCTCT ACGGTAGTGA GTCCTTGCGA GATCTGGTTG TTTAAAGGG  
278151 TGTGGCATCT CTCTGCCAC TCTCTTGCCC CTGCTCTTGC CCTGTGAGAT  
278201 ACCTGCTCCC CTTTACCTT CTTTCATGAG TAAAGCTTC CTGAGGCCTC  
278251 ACCAGAAGCT GTTGCCAGCG CTATACATCC TGTACAGCCT GCAGAACTGT  
278301 GAGCCAATTC TTTTCTTATA AATTACCCAG ACTCAGGTAT TTCTTTATAG  
278351 CAATGCAAGA ACAGCCTAAT ACAATGTGAT AAAAAGGAGA AATGCAGGAA  
278401 AAGTGATGAG CATAAAATAA ACCTTTCAGT ATGTAAATAT CTGGGCACCA  
278451 GCTGCACTCA TGGAGGCCAG ATGTCAGCAC CTACACGTGG AACCCTAAGA  
278501 ATACAACAGC TGCAAACAGA ACCTGTTACA CGTCTGTTAT GTTGACAAC  
278551 TGAATATTCA AGTGTGTGCG CTTTAGAGAT GGGATTCTCC AAAATGGTGA  
278601 ATGATTCTTG ATAAAAAGT AAACAGAATC TACAATTGAC AGCAGAGGTG  
278651 CATCCTTGGA ATGCCTTTGC CAAACCCGGG GCAAAGGGGG TGAATGTCGT  
278701 GTAACACATT AGATTCTAGG CTCAAGTAAT AGTAACCAGA TGTTTGCTG  
278751 CCGTGAGTGA GACATTTAAA AATTCAGATG AGATGCCAGG TGTGATGGTT  
278801 AATACTGAAC GTCAACTTGA TTGGATTGAG GGATACAAAG TATTAAGCCT  
278851 GGCTGTGTCT GTGAGGGTGT TGCCAAAGGA GATTAACATT TGAGTCAGGG  
278901 GGTGTTGGGA GGCAGATCCA CCCTTGATCT GGTGGGCACA ATCTAGTCAG  
278951 CTTCAGCGA ATATAAGAA GGCAGAAAAA TGTGAAAAGG AGAGACGGGC  
279001 CTGGCCTCCC AGCCTACATC TTTTCCCAG GCTGGTTGCT TCCTGCCCTC  
279051 GAGCATCAGA CTCCAAGTTC TTCAGTTCTG GGACTCGGAC TGGCTCTCCT  
279101 TGCTCCTCAG CTTGCAGACA GTCTATTGTG GGACCTTGTG AGAGCTGCAA  
279151 ACAGAACCTG TTACAGGTGT GTAAGTTAAT ACTTAATAAA TAAATATATA  
279201 TATATCTCTC TCTCTCTTTT GAGTTCTGGC CCTCTAAGAG AACCCCGACT  
279251 AATACACCAG GCCAGCAGAA GTTTTTGTGC AGGATGGTAC CGTGAAGGTC  
279301 AGGATCGTGA GGACCCCTGG CCCCACCCAT TAAGTGCTAC CAAGGCCCTC  
279351 CAATCATTGT GACAACCAA AACATCCCCA CAAAATTCCA AAACGCCCTC  
279401 TGGGGACAGC ACTGCCCTTG TTGAGACCGT TTATAGAGAC TCCTTGATG  
279451 TGCGATGAGT CCATGTGGGA GCTAAGTGCT CCCTTTGCCCT GACCCATCAG  
279501 CCTCAGTCTG GAGCCAGTAA CCCTCATCTT GATCACTCGC GGAGGAAGCG  
279551 ACAGCCTCAG ACCCGGCCGT GTCTCTATGG ATGTGCCAC CACTCAGTCT  
279601 AGTGGCCACT CAAAGGCCAC AGTAGCTCAA GCTCAAAGCA GCTACATTC  
279651 TGGACATCAC TGACGCCATT GCCTCGCTGA CGCTGAGCAA AGTTACTGCC  
279701 AGCTCCACAG CCGGCCCTTT CCCCTTAGTT AGATGTTTGG GAGGATGCAG  
279751 CCTCCCAAGG AAGTCTTGGA AAAAAATTA ATAAAAATTA ACAGGAGGTG  
279801 GAGAAGGCAC CCACACTCCC ATATCCCCTC CGACTTCCCT GCCTGGTGAC  
279851 TGACCTCTAG TCCAGCACTA CTGCTTCTGC TCTTGGGGCT GGTGACAGGG  
279901 AGAGTGGGAG GAGGGCTGAG CTGCTGGACA GGGCAAAGGG GGAGCCGGAG  
279951 TTCATAAGAA GCTGTTGCCC ACCTTCCACA AGGAATGCTG ACCTGTTAGG  
280001 GAATCTAGCT GGTGGAGGTT TTCCACTAAC ACAATAGTAA AAAATAAAGT  
280051 TCTTAATACC AGGAGAGCTT TAGCATTTAT TCATGTTTTC ATACAGTGCT  
280101 CTTTCACTCT GGGGCCACCT GACAGATCTG CCAGTCAACC ATAAAAAGTA  
280151 TATGTGGATC CCTCTCCCAG GGATCCAACC AATTTTGCTT TCTCTAATAG  
280201 GAATAAAAGA GAGGATTGTA AATGTCAGAC AGCAGATTGT ATAGCAACAT  
280251 CAATTGAACC AGGCATTCAT AAGCAAATGT ACCATTTATC TAACAAAGGT  
280301 CTGGGTGGTT TTGTTAATTT AAATGACCTG ATGCTGGGGT GCAAATTGAG

280351 ATGAGGCATT GTCTGCGTAT TCAGGTGCAA GTGGAGGTGG ATATTGCCAC  
 280401 CAGCCTTGGA GTCGGCTGGA TCTGCTCCAG TGCAGCACAG CCGGGGAACC  
 280451 AGGCGCAAGG TCTGCATGGC CTCGTGTGTG TTTAACCCCTG GGTAAAAGGC  
 280501 CATGTC AAGC CTTACACATG CAGATTCTGT TTGTGGTTCC AAAGTGAGCC  
 280551 TTGTACCTTC AACCTAGAAA ATTCAAATTT AGCTGAGATG ACAAATATGG  
 280601 AACTCCAGG GAAAAGACCA GATGGAACT GACCGAGAAT AGTTTGGCAG  
 280651 CCTTGATGCA AGGCCCTCTT TGAATCCTGG GAGGATGAGG GGCTAAATCT  
 280701 AAGAGGCTGT AACCACCTGA TTTCCCTCAG CCAGTCCCTG GATGCTAGAG  
 280751 TACCCACACG CCAAATCCTT TATGTAGGAT CCCAGGACCT TGGCATGGCC  
 280801 AAATGCCAGG AGGTGACCTT TGAGAGAACC AACCCTTTCA GCCGCAAACT  
 280851 CAGCTGCTGT TGATGGCTGT CAGCTCAGCT CAACAAGAGA CAGACCCAGT  
 280901 CCTGTAGCCA TGCCCTCCTC CCCCTGAAGC CCTTATACTG GCCTCTGTTT  
 280951 CCCAATTAGA GGAACCAGCA CATCCATGCC TTACCGGGAA GCAAGAGCCA  
 281001 GGATGTTGGA AGGAACTGCT CGGCTCTGTC TCTGGGTCTT GGCTGAGAGG  
 281051 CGGGCACCTT CCAGCTATTA CCCAGTTTCT CTTTCTGATT TAATCCCTGG  
 281101 TAGTTTCTCC TTCCAGGCCC CTCCTGAGAG CCAGTCAGCT CTCAAGCAAG  
 281151 TGGCCCAAGT GAGCCCTGTC AGGTAGGGGG AAGGTAAGCA TGTTTGCTAA  
 281201 AACTGTGTTT CCCAAAGCGT GCTCAGTGGA CTATCTGTGC TAGAATCAGC  
 281251 AGACTCTTAA AATGCAGCTT TCCGGGCCTC ACCCCATACT TGCTACCCTT  
 281301 CTAGAAGCTG AAAATTTGTT TCTAACAGAC CTGCAGACCT TCTAGAGGTG  
 281351 AGAATCTATA GCAGCTCTCC CATACCGTTG CGTTTCTCA GCTAGGCCTG  
 281401 TCCTGGGCTT CCTCTAGGGA AAGCCAGAGT AAACAGGTTT TTCGTTGAGT  
 281451 TTCCTGAGGC CCTGGTGTGA TGTGGTTGAA AGACCAGGGT CAGGAGATCT  
 281501 GGGTTCTGAT CTGAGTCTGT CTACTAGTCT GCCCGTGGT CCAGCCACGT  
 281551 CCCTTCCCCA CCTGGGCCCT CAGTTTTCCC ATCTGTCTAA TGACTGCATT  
 281601 TGGCTCATTG CTGGTTCTGG TGTGGGACT AAGGAGTGAG GAGTGTCCA  
 281651 GGGAAAGCTC CAAGTGATGG AAGGGACAGG AGGCAGGCTG AGTTCTCCA  
 281701 GGCCATGGGC AGGCTGCAGC ACCTGGTGAA GGTATGCCCA CCGTAGGTCC  
 281751 CTGTTAGCAG TGTTCTCTAA GAACGTGAAG TTATTCACCC AAGAGATACA  
 281801 AAGATGCTGG GAGCAGTCTT TGCTTTAAGA AGCTCAGTCT AGGAGATAGG  
 281851 ACAAGGACAA ACCCTCCAG GCTCACAGAG CCAAGGTCCA GAGTGTGTGG  
 281901 TTTGGAATGG ATGGAACAG CTCTGTGGAA CTGGGCCCTG GCAGAAAAGT  
 281951 CAGATTTGAA GAGAGGGTCT GCCAGGAGTG GGGCACCTGG GAGCAAGCTC  
 282001 TGGGGGCGGG CTTTCTGGCA GGGAGTGGGA AGTCAGTGGA GCCAGACTGG  
 282051 GACCACTGGG AGGGCCTTCA AGGCTAGAGT AGCCAGTGGT TTTAGGCCAA  
 282101 TGACAGGCAT AAACACCGCC ACAGGGTGTCT GAGAGAAGGG GATAGTGACC  
 282151 CACTCACTTA GAAGTCACAG ACCCCAGGGG ACAGCGGCAG TGGGTTACCA  
 282201 AGTGGCACGA GTTCCAGTAC ACCTGTCCAT GTTTGTTTGG GGATTGTGAG  
 282251 AAGACTGTAT CATATGTGTG TAACAGTCTC TTGGAATTTT CAGAGTTTGT  
 282301 TGGCTCAGTC AACACTGTCA GTGAAACGAC ATCATGTAGT CTAATAATATA  
 282351 TCTTAAAGAT AAGCCCATTT GTTTTGGCAT TTATTGTTAA TTGAATTTTC  
 282401 CCAGAAATGG CAGCAGAAAG ATTGTTAATG TTCATGAATT TACATCAAGT  
 282451 TAAACATCTG TTCCTCTTAA GCTAAACTCC AGCAAAGTTA CGGCAGCTCC  
 282501 TAAATTAGAG CTCGGAGTAA AATCCTGCTT GTTCTTTGCG CAGCTTAGCA  
 282551 GTTTCAAAT AGACCTCAGA ATGACACATC ACAACTGAGG CCCCTGTAAC  
 282601 GCAGCCGCAC TGAGCTATAT AACATGGGTG CCAGACAATT AAGCCAGGTT  
 282651 TTTGCTTTGG TGGTGAAGAT CGAAGCTTTG CTGGGGCAGC ACATGACATG  
 282701 ACTTACCAGG CTAATGGGGA AAGTGTGGGA ACCAGTGTG CTAATGTCTG  
 282751 GGGGACAGGC AGCCAAGAGG ATGGGGGCAT GTCCGTGTCT TCCCTTGGGC  
 282801 CTCTCTGGGG GGTCTCAGG TGAGGTTTGG GGATCTGAGC TCTAGCCACC  
 282851 CTGCCAGGTT GAAGAGGGGC TGGAGCCAG TGAAGTGCAG TCCAGAGAGT  
 282901 GGCTGGTTAC TATGTGGTTT CTGCAGGGAT GGCCTGTGTC TGGTTTGGGA  
 282951 AGAGAGATCC TCACCCCATTT GTTTGGCATT CAGAGCAGAC CCACCATCCC  
 283001 CCACCCAGGC AAGTCTTTCT TCCCATGCC TTTGCCCTTA GTTCCACGCC  
 283051 CCCTTCCCCA AAGGGATTGC TTCCAGCAGT GGCAGCTGAG CTCTTTCATG  
 283101 ATGTTGAGCC ATGTCCTGCG TTCCCTCTC CAGTACATTT TGGATATTCT  
 283151 TCAAAGGGGG ACTCCTGAGA GTAGAGTGAC CCCAAGAAGG GAGATTCCAG  
 283201 CACCCCGAG ACTCATGGGG CTGTGGTCTT ATAGTGGCCT GGGGATTCCC  
 283251 CCCACCCACC TTGACCCAC ATTCTGCCTG TGTATAAAGC TGTCCCAAG  
 283301 AACACAGATG GTCCACAGGG TCGGCTCTGT TCATTTACTG ATCAGAGCCG  
 283351 GGGCAAAAAA CAGGGTCTTT CCTGAAGCTA TGCCATAGCC AAATTCATCC  
 283401 ACAGGCCTCC TTACCTGGGT GGCTGTTTCA AGCACAGGGC GCTCAGCTGG  
 283451 CCTCTTCA CA GGGTGATCCA CGGCTCTCCT GACCAGCAAT GCCAAGACAA

283501. GAGGGCAGAA GCTTTCCTCC TCCTCTCCAG AAGCAATTCC CAGGCAGCTG  
 283551 CCTTGTGCCC ACCACACTTC TATGCAACCT AGTGTCCAGA GACCACCTTG  
 283601 CCACCACCCC TAGCCTGGCC ATGCTGGAGT TCACTCCATG GGAACAGCAT  
 283651 TGCAGGTTTT GGGTTGTCCC CACTGGGTGA GGTATGGAGG TCTGGGCTTC  
 283701 AGTGAGCATG GCCACATGTA CCACATGGTC AGCATGCCCC CCAAGGAATT  
 283751 GACATGATGG GTGACACAGG CACTAGCCCC CTTCAGAGAT CCAGACCCGT  
 283801 CACCATGGTG CAGGGTGGCT GGGATTGTCT CCTCTTCAGG GCAGGGCCGT  
 283851 AGCCACTCTC CAAGCCCACC TGCCACCTGT CTCCACAGT CATACCGGTA  
 283901 ACAGACACTG AATGAGCCCC TTCTATGTGT GGATGCTGGG CCAGGTGCTG  
 283951 GGGGTACACC TGTAAGCAAG GCCCCACTGC ACTGGAGGAG CTCACAGTCT  
 284001 AACAGGGAGC GTGATGATCC ACAGTGGATG AAAAAGTCAC AGAAATTGAA  
 284051 GGTGAGAGAA GGTGGCAAG AGAGAACAGG GCAGCACACG AGGGTGCCCG  
 284101 TTAGGCAGGA TTGGTGTGTT AGGCGAGGGA GGCTGAAGGA GTTGGTGAAG  
 284151 AAACACCTTG CAGTGAGAGA GTAGGACGGG GCAGCAAGAG AGAGCCCACT  
 284201 TTCCCGCCCC ACCACCATGC AGGTGCCTCA CCCCTGGGAT CCAAGGCTTG  
 284251 GGCTTGACC ACATGGCCTG TCTCCCTCTC AGAATCTGAG CTCCCGACAG  
 284301 CCTGTGTAGC ACTTTCACA TTGCCCACAT TACACAACGC CTCCCTCCCC  
 284351 TTGACTCTTC GGAGTCTCCC AGCCCCACCC ATGCCTTTTA CAGGAGCTTC  
 284401 ACCTGCCACA GAATGAAGAT GGTCCCTTTG AGCACAGTCT GGCAGGGGCA  
 284451 CAAGTGGCTG ATGGAATATT TACAATGTCT CCCTTGCTTC CCTTTGTTTT  
 284501 GCAATAGAAA GTGTTTCTTT GATGGACATT TAATTCCAGA GACTGCTACC  
 284551 TGTACCTAT CTCCCTTTGC TCAAAAATTA AATGTGGATG TGCCTGTTCT  
 284601 CCTGCTATAA TCATCTTCCT CTGTGTGAAG GGAGTGCAGT GGAATGAGA  
 284651 GAACATTAGA ATCTTCAAAG AGGGACAATT ATTGAGGGAA CTAGATTAAT  
 284701 GAGGTGTCTA AACAACCTAG CCGGATCTGC GACTGACCTT TCTCATGGAG  
 284751 AACGGGCTTG ATAAATGTAG TTCATTACCA AGTTCTGACA TGAAAATAGG  
 284801 ATCACACTCT GGGCTCCTCG GCAAGCTGAT CAATATTTTA TCTGCCAAG  
 284851 CAGGCCTGGT CTGGGAGCAG GAGGAGCCCC ACGCATGTGC TGGCAAGGAG  
 284901 CCTGAGGCCA GGGCCAGGGG CTGGCCAGGC CAGCCCTGTG GCATGGAGGG  
 284951 CACCCAGGCT GGCAGGAAGG TGGCTGAGCC CTTCACAGAG CCTGCCAATG  
 285001 ACGCTGTCTG GTGCAGGCTT ACCAGGACAT GCAGCCTCTC TCCCCAAGAA  
 285051 GCCCCAGATG GGGCATGTGC ACTGGCGGTC AGGAGGGAGG GAGAGGATCA  
 285101 GGACATCTTC TGTCTTCTGT TTAGCCATGA GCACTGATTT AGTTGCCAAC  
 285151 CTGTCCCAGG CCCCACAGTA AAGGGGACAA AGACAAATGA GCCATACCCC  
 285201 TCCCTTGGGG CTTTGAGCCC ATCTCACCAA GAGAAGACCC CAGGCCTCGC  
 285251 CAACCACTTG CTAAGTCCTC ACATTTCCCT GTATGCTATG ACCCTGGAAG  
 285301 GCAGTAAGAA GCTATTATTA TCCCCATGTG AAGATAGGGA ATAGGAGTAG  
 285351 GAAGGGCAGG GGAGTGAATG CCTTTCCTAA GGTCTCACAG CTGAAGTCAG  
 285401 GTGGTCTCCT GATCCTCCAC CCAGTGTCTT GTCTGACCTT GTGGTGACTG  
 285451 TCATTAGCAG TGTTAATATC AGGTAGACAC GGCAGCCTAA GATGAAGTCT  
 285501 GTGTCCCCCT GAAGACCTTA GACAAGGTTG TTATAGGGTG AGCCCATCAC  
 285551 CCTGGCTCCA GCTTCATGAA AATGCCCTGG AGCCACAGGA CTCTGGTCCT  
 285601 CTCATTCAAC AAGCATTTCA TACTGTAATG CTGCATGGGG AGCTGTCCAC  
 285651 TTCAACTCCT GCCTGCTCAG AACATGTAAT CCCATTAAGG GGACATAGCA  
 285701 GATGCTGAAA GCCGCCATC CAGCTTCCCT CAGTCAACCC CAGAGGTGAT  
 285751 GTGCAGCTTG GATGGACGAT TCCCCATAAC ACTTGCCAAG AGCATCCAAT  
 285801 CCCAGGCACC TGCAGCTTCA GCCTGAGGAC ATTTTCCGGT CTCAGGCGTG  
 285851 GACTCAGTCC TCATTTGGGA GGTCCAGAAC TGCTAGCTGG AGGTGGTGAA  
 285901 TTCCTCCAAG AGCAACCTCA GCTAATAGGG ATGGAAGTCA GTAGAAAAAT  
 285951 ATCCTGGCTC CCTCCCACCT CAGTGAAGCA ATTCTGCGGT GTGTTCTACA  
 286001 CAGTCCCTCT GAGGACCCCA TGGGATTGAA CCCCATTGC CCACGGCGGC  
 286051 AACCCACTCA TGAGTGAACC CTTTGTGGC TTTTCTCCCT TCCCAGTCTA  
 286101 CTTCTGTGTC CTTCCAGCAC TTCTTGGGAT CATCTTCAA TATGCTGCTT  
 286151 GCCCTAGAT CCTCATCTCA GGGACTGCTT TGGGGGAGCC CAACTAAGG  
 286201 CTGGGGCAAG CCTCACTCAG AAAGGATTTT ATAGCAGGCA GAAAGGAAAG  
 286251 CTGAGGGAGA AGGCAGTCCC CGTGTGGGTG TGTGTGGGTG TGTGGGTGTG  
 286301 GGTGGGTGTG GGGGTGTGTG TGTGTGTGGG TGTGTGTGTG TAAAGTGACA  
 286351 AGCTTCCCTAC AGACGAGGTG GATTGGCCCT GAAGACAGGA AGGGGTGGG  
 286401 GCAGCATGAG AAAGCGCAGC TGTGTTTCTA GCATAGGGAA TTTCCAGCTA  
 286451 TGGAGGGGGC TTCCCTGAAA TTCTCCAAAC CTCACTGTAA GGCTTGACTT  
 286501 AGCCAAGGTT ACCACAAAGG CAAAGACAAA ATCCCTTAT TTGGAACAAC  
 286551 ACAAAGTTCT CTTTACCTGG AAACCAGCAA GACTCAGAGA AAACACTGAA  
 286601 ATGACTTTCC AAACATGTGG GCAGAACTT GTGCAGTCCA AATCACGGCG

FIGURE 3, page 91 of 188

286651 GTCCTGCCCA CTCATGAAGC AGGTCCCCTG CGGGTCCCAA CCTGGCAGCC  
 286701 CCTGCTGAGC CTCATTCAAG GCATGGACGT CAAGGTTATA TGCAAGCATC  
 286751 CCACCTTTTC TCTGGAAGAG TCACGCCTCC GGATTAATCA ATGCTGAAGT  
 286801 TCAACTGTAT TCTGAGTCTC CCCATCCCAG GCTGAGTTAG AGAGGCCCTG  
 286851 GCAATGGGAT CCGGGCCCCA GCTCAGGGCT CCTTATGGCA TTCTCTCGAA  
 286901 CCATTCTCTC GAACTCCTGA CCTCAGGTAA TCCACCTGCC TCGGCCTCCC  
 286951 AAAGTGCTAG GATTATAGGC GTGAGCCACC GCGCCCGGCC TGCCACTATC  
 287001 ATTCCTCAACA TCATCTTGAC CATCACCCAC AGGGGCACCA GGGAGGAGTG  
 287051 GGGTGGTCCC CAAGCCTCTG CCACACACCC CAGGGACCTT CCCTCCGAAG  
 287101 GAGTAAAGTA TCCTGTGGAC CAAGGCTAAG GCTAAGACTG GACCCGTGCC  
 287151 CTGTCGGAG AGATCTGATT CCTCCCTAC CTGGGAGCCA GGCCCAACAC  
 287201 ACACAGTGTC AGGGCACGGA GAGTGATGAA GGTAAGGGGT GCCAGCTTAC  
 287251 ATCAGGTGAT GTTTAAGCAG AGGCCAAGAT GAATACACCA GGTGGAGATT  
 287301 TGGGTGAATA GCACTCCAGC CAGGGGGATA GTCAATGCCA GGCCCTGGG  
 287351 CAGGAGCATG CCCAGTGATC AGTGCTGCTG AAGTCCCCTT GGTCCCCCCA  
 287401 TACCCCCCAC CTCTCTTGTA GTCACCTGTG TGGAATTGCT GGGCAGGTGG  
 287451 GCAGGGCTGA CTGGGGTGAA GATAAGAAAG ACATGAACCT TGGGTGTTGA  
 287501 CACTTTCTTG CCCAAAATGA TTGGAATTTT TTTTTTTTTT TTTTTTTTTT  
 287551 TGAGACGGAG TCTCGCTCTG TCACCCAGGC TGGAGTGCAG TGGCGTGATC  
 287601 TCGGCTCACT GCAAGCTGTG CCTCCCGGGT TCATACCATT CTCTGCCTC  
 287651 AGCCTCCCGA GTAGCTGGGA CCACAGGCGC CCACCACCAT GCCTGGCTGA  
 287701 TTTTTGTAT TTTTGGTAGA GAAGGGGTTT CACCGTGTTA GCCAGGATGG  
 287751 TCTCAATCTC CTGACCTCGT GATCCGCCCG CCTCGGCCTC CCAAAGTGCT  
 287801 GGGATTACAG GCGTGAGCCA CCACGCCCGG CCAATGATTG GAATTTGAGA  
 287851 AGAATAGGAG GAAAGATCAGA AAACAGGTCT CGGAGCCCGC ACAGCAGACG  
 287901 AGGGCTGGAC TACGTGAAAG AGCTCATTTT AATAATGGGC TCAGTGTAC  
 287951 TCATGGAGAG GGCCCAGCTT CACATCTGGC CAGCAGTGTG TTGACAGCAG  
 288001 CTGCATCTGG GAGGTGGATT TCGGGATGAT TTATTTTCTT TTTCTTTATA  
 288051 TTTATTTGCA CTTTCCAAGT GGTCTCTGA TGGGCATGTA TTTCTTCTAG  
 288101 AATTAGACAA ATGTTTGAAG CTGGAAGAGG GGAGGGAGCC TTTAGCTGAA  
 288151 GACATGTCGG GTGGTGTCCA AAATGCCAG TGCTTCACAC AGCTAAGTCA  
 288201 CTCTATCTG ACCCCACAGT GAAACCAGCA GGGGGCAGGA ATGTAAAAAT  
 288251 AAAACTGGAA TTTGGTAACC TATGACTTTG ACACACCTTG CTAGGAAAAAT  
 288301 ATCTATCCTG GAAGCCAAGG CCAGCTGTGA GGGAGGAAAT CTATCCAGGG  
 288351 AGACTGAGCT GGAGGCTGCA GCTTTGGGGC ATCTGCCTCT GGGGGCTGGA  
 288401 AGAAGGCAAG GAAGGAAGTT TTCCCTCCCC CACTCCACCT CAAGCCCTGT  
 288451 GGAATTCGGA TGACAAAGG AGGGAGTGAA GGCAGGGAGC CACCAAGAGG  
 288501 GCAGCCCTTG GACTGTAAGG CTCAAAAGCC TTCCCAAAAA GCAGTTTGG  
 288551 ACTTTGGGAT CTCGAGTGAT CATCTGCACA GAAGCAGAGC TCTGAGCATC  
 288601 AGGCTGCCTT TCCTCCAGGG TCCACGGCCC TTCCCAGTG CTGTGGGCA  
 288651 CCAGAGGAGC TCAGTAATTT CGGACAAATG ACTTCATGAT TTAAGTTTGG  
 288701 GCAAAGTTCT CTCTTGCAAC TCATTAAAGC ACAGTTGCTC CTGGGGTAAA  
 288751 GAAGGATTTA AGATTCTGTT CCTGGAATCC CTTGGTTTCT CTCAGGACCC  
 288801 CAGTGGCAAG CTTGGCCCGG GCATGGAGTG CCCTCAGTAA AGGGAAGAAA  
 288851 TGACGAAGGA AGTTTTGAAC AGCATGATGT ACGGTGCCAC ACACTTCCCC  
 288901 AAGGCCTTGG AGGCTCTGCC TGGGTTGTCC CACTGCCCTC TCCTGCCTGT  
 288951 CTTGTTTTCAC TCTCCACCTG ACTCAGCCCC TCTAGCCCAG CCACACCAGC  
 289001 TTTACCAGCT CTCCAGACGT GCCCCACCAT GGCTCCTGCA CGCGCAGTCC  
 289051 TGCTCCTGGC CTGCTCTTCC CTCTGCTTCC TCCCACAACT CCTCCTCTA  
 289101 CAGGTCTCAT CCTGAACATC CCTCCCTTGG CCTCCCACCA CAGGCACCCA  
 289151 CAGTGCCCG GACTGGAGGC TGCCCAGCAT CGGGCACACA GTATGTAAAT  
 289201 AAACACTGGT AAAAGGATGG GAGTGGCCTG GACAGTGTGG GCCCTAGCAG  
 289251 GGGGTGGGAC CGTGGGCTCA GGGAGCTGAT GCTGGAGACC TGGAGGGCCC  
 289301 ACCCCTTTCC CCCAGAAGAT TGACTTCTAG ACCTGCACAT ACCTTCCTGA  
 289351 CCAGAAGGTG TCTGTTGGGC AGTTGCCAGG GTGAAGCAGC CAGAAGTCTG  
 289401 CTCTCACAGG CAGCTGTGAG GATGTGAGGT GGGGCCGAGC CTGGGGAGGA  
 289451 TGCTGCAGCA CCCCACTTCC ATCCCAGCAA GACCCACCTG GATGGTTTCC  
 289501 CCCACCTGCC AGTGTGGAG GTGTTGTCCA GCTGCAGACC CCTGCTCACA  
 289551 GGGGGACGCC AGTCCGTGTA GCTCTACAGA CTTGAGAAAT GGGTTTGCCA  
 289601 GCTGGTGACC CCAAGAACTC CCAGGGCGCT CTCCATGCTT AGGCCAGCCT  
 289651 GGCCACTGGG GTCCTGAGAC GAAATAAGAG GCTCCCAGAA AGGAATCTTG  
 289701 CCCAGGGCAG CAGGCAGCTC AGAAGTGGTT TACGCCCCAC CAAGGTCCAG  
 289751 GAGGAAGGTT GGGGGGATCT GCAAGGATGG GGCATCCTGC CCTTTTGACC

FIGURE 3, page 92 of 188

289801 CAGCCTGTCC TCACCTTCAG GTGGCCCTGC TGCAGCATGT TCTTCGGAGC  
 289851 CTGATTGTCC ACCCGTGTTC CTGAGTACAG CCTCTTCCTG ACACCATATC  
 289901 CACCTGTCTG GTACATCAAT TTTTCAGTAT CTGGGTATAA ATGCCCCCA  
 289951 CTCAGGAAG TCCTGGGGGC TGCAGAAATG CTGGCTCCTG CAGACCCTCC  
 290001 ACACAGGCAC ACATCCATCT CCATTTACCC CAGCAGCTGG CCCCACCTCC  
 290051 ACTTTCATTC TGTACCCCCA CTTCTGGTCT ATTTGCCAGG AAAAAATTTT  
 290101 AGCCTCTTTC AGGGAGTGAG GAGCTAGACT CAGGCAAAAC TATTCCTCCT  
 290151 CTTCCCCAAA ACTTATCCTT ATCCAGGCCC AGAAAAAGGA AAAACCCATC  
 290201 AAGTTTGTGA GGGGCACAAA GCCACTATTT TCAATGCCCT GTAGCTCTAC  
 290251 AGACTTGAGA ATTGGGTTTG CCAACTGGAG GCCCAAGAA CCCCAGGAA  
 290301 TCAATATCCT ACCAGGCAAA AGAGGGATGC AAGCAAGTG AGGGTGTGGG  
 290351 AGAGAGGCAC TCTTGTCTGA GCATGAAGAC TCCCAGAGAG CAAATAGATC  
 290401 TGATTATATT GAACACAACA ATTGATTTTT TTCTAAATAA ACATGCAGGA  
 290451 GGAAATGGCA ATGGGCATCT GTTCTGACA GAAATCAATT GACCCCAAAT  
 290501 TGGAGAAAAA TCTGGAAATA CAAACAAGCA CAAGAAAAAG TGGTTGGGCT  
 290551 GTCCAGGCTT ATCAAGGGAG GGTATGAGGG AGGAAAAGAG GAAGGGAGGA  
 290601 AGAGAGAAAC AGACAGACAG ACTTCCCCAT CATCCCTTTC CCCCAGTAG  
 290651 CTTCCCTGAT GATTGCTCTT CAGTAAATGT GGTTCCTATA ATGTCAAGGG  
 290701 AGAGAGTAGC TATCATGTTA TGAGCCCTTA CTGGGTGCCA TGCTGGTGCA  
 290751 AAGGCCTGTA TGTGCACATC TTAATAATC CTCGTAACAA CCCCTTGTGG  
 290801 GAGGCACTGG TATCTCTGCT TCACAGATGA GATCACTGAG GCACCCTGCC  
 290851 CAAGGCTACA TGCCTGATGG CAGCAGAGCT AGAGCTCAAA CCCAGGGGAC  
 290901 CTCAGAGCTC ATGCTCTCTA ACACCTCTTT CTATTGACTC TCCAACCTG  
 290951 GGATATTATC TCAGGCCCTA AACTGGCCTT GGAATTAAGG AGAAGAGCCC  
 291001 CAGGCTCCAG CAACCCATTG GCCTTCAACC TGGAAATGGT AGTGAGGAGC  
 291051 CCATGCGTAT TCTCCAGGAT TCAGCAAAGC CAGGCGCTGG AAGTACTCAT  
 291101 CCCCAGGGA GTCGGGAAGT GGGGCTGGAG GGGCTGCCCT CTCCGCTGAC  
 291151 ACTCCTGCAA TCCAGTGTA TGGGCGTTGC CCTGCGTGAT GTCCATCCTA  
 291201 GAAGCCCCTC ACCAGCAAGA TAAACTGTGC CATGCTGCAA TGCATCCCAG  
 291251 GCTTTACTTC CCCAACACT GCATGGTTCT GATGCTGTTC AGCAAGCGCG  
 291301 CCTGGGATAA AACGAGCTGT GTGCTTCGGT TTTAACGTTG TAAAGCTTCT  
 291351 TTTTGTCTT TGGTCATAGA CTTGTGTATA TGTTTGTGTT GAAGTAATCC  
 291401 AGCTCTGGGA GGGTGCCTAA TTAACATAAG CAGGGCTTAT TAGTCCTGTT  
 291451 AACTAAAAC CCCTAATCTA GGAGGCCAAG TATTCAAAG CAGCCTTTAA  
 291501 GGTAGGATTA AGGCAAAAAC CAGTGATTAC AAAATGGAAT TGGGGGTAGC  
 291551 TTTCTAAAG CCTCTGTGGG GCTGCCGCTA TATATTCCGC TGGAAGAATT  
 291601 TCCCATTCCA TCTGGCAGTC ACTCTAGTCT GGCTTGAGT GGTGCTCAAC  
 291651 AAATATTGTT CAGATGGACA GATTCCCTCC AGCATTGCA TCATGGGCAT  
 291701 GCATTCCATG TTCCATCAAT ATTTATGGGA TGGATTGGTG AGCAGAACAC  
 291751 AAACAAGTCC CATCGACGAC AGTTGCACCG TGCCTGCAAC ATAGTGAACG  
 291801 CCTGGTGGCT ATTTGTGAGT GAGATGAATG GACCAGCGGC AAGAATGTTC  
 291851 TCTCAAGACC ACGGGATAAG TCTCAAAATA ATAACCTCAC CTTCTCTTTC  
 291901 AGGTGACACG TGCACCATGG CCGGCTACGC CCGCTTGAAG AATGTCCTTC  
 291951 TGGCACTCCA GACCCGTCTG CAGCCACTCC AAGAAGGAGA CAGCAGACAA  
 292001 GACCTGCTC CCCAGAAGCG CCTCCTGGTG GAATCTCTGT TCAGGGACTT  
 292051 AGATGCAGAT GGCAATGGCC ACCTCAGCAG CTCCGAAC TGCTCAGGTGG  
 292101 GCATCGTGTT CAGTGAAAGT CACATGATGG AGGAATCCAG TTTTCCATT  
 292151 CCCACCCCG CCCCCTGGTG TCTAAGAGCA TGTGTTCAAT ACCTCTGAGA  
 292201 ACATCTCACA AACAAAATGA GGTCAGGTTT TTCCCACCAG CCACCTTTAG  
 292251 CCTCTATTTA CAAACAAGCT TTCAGGCCCT CTCAGCTATC TGGCAAAAAA  
 292301 CTCACTTCAG AGGGCCTGGT CTCTGATGTT TTGACTAGGA AATCAATCTT  
 292351 TTCTTCTTGG AGTAGGATTA GTTACTCAGC AGAAAAGTTA CAAGGAAGCA  
 292401 GTGCTTGGTT TCCATTGAAC ACCATTGGAG CTATAACCTG GAAGTCCCCA  
 292451 AGTCTTCTAC CTTAGGACAT CACTGCTCCT TAGTATCCAA AGATCAAGAA  
 292501 CCCAAACCTC GGACTGCTTG TTTGCAGAAA GCCCTGTGTC TACCCGTCAA  
 292551 CCCCACCAA GCCCTGCTCT CATTGTTGGG AACACTTGCA TTACACCTG  
 292601 AGGTTTGGCT CTTCCCTG AGACTGCGAT GTTCAACATA GCACACATG  
 292651 CCTTTGTCTG GCTACAAGGT GGAGCAGGGG TAGTTAGTGT CTGCAACATA  
 292701 GAAAGCAAGG AAAGAGTGAC CTCCTCACT GGGGCCACAG CCACTGCCAG  
 292751 TTGCAGGGAG GAGCCTGTAG GGTCTGATG GTAGAAAAGC TGGGGTGGGC  
 292801 TGGAGGGGCC TGCATTCTTA CTTCTGCTTA CTGGTTTGT TCTAAGGGTC  
 292851 TGAGCCCTA GAGCTGCACC AGGCAGGTAC AAGATCTGCA AGGAGAGTGA  
 292901 GATCAGCCTC CCTGAGTTGG GTGGTGGGG GCGGTGGGCA GCCTTTTCT

FIGURE 3, page 93 of 188

292951 TGTGACCACA GACTGTCCAC CCAGTGGATG GATAATAAAG ACAGGTCCCC  
 293001 ACCTTTGATG CCAATTTAAA GATATCTTAA ACATGGCACA GGGACCTTCT  
 293051 CAAGGCTGTG GCCCGGTCAT TGGGAAGAAG TGGGGTGGGG AGTGCCCTAA  
 293101 CATTCAATTGA GCCATGTGCT TGACATTGAG CTAGGCCCTT GACCTATGAT  
 293151 TAATAAACAC AGAAGAGTTC GTTGTATGT AGGATAGTGG CAAAGAATGC  
 293201 AGACTTTAGA GTCAAACTGC CTAAGGTCAA GTGCTGCGTC CAGCATGTAT  
 293251 GAGCTAGTGG ACCTTGGGAG ACAATGTCGT TTCGCTGTGC CTCTGTGTTT  
 293301 AGCTGTGAAC CTCACAGGGT CATCATGAGG GTTAAATGAG CTAAGATAGT  
 293351 GAATGGCTTA GAGTGGTACC TGGCATGTGG TATGTTTCTT TTTTAGACAT  
 293401 GGTCTCGCTC TGTCACCCAG ACTGGAGTGC AGTAGCGCAA TCTTGGCTCG  
 293451 TTGCAGCCTC TGCCCTCCCAG GCTGAAGCCA TTCTTCTGCC TCAGCCTCCC  
 293501 AAGTAGCTGG AATTGCAGGC TTACACCACC ACACCAGCT AATTTTGGCA  
 293551 TTTTGTAGTAG AGATATGGTT TCACCATTTT GCCAGGCTGG TCTCAAACCTC  
 293601 CTGACCTCAG GTGATCCGCC CACCTTGGCC TCTCAAAGTG CTGGGATTAC  
 293651 AGGTGTGAGC CACTGTGCCT GGCCACATGG TGTGTTTCAA TAGAGAGGTC  
 293701 ATCAGTATTG TTGCCATCAT CATCATTTTT ATTATTATTA TTTCTCCTT  
 293751 AAATCTTTCG ACCATCCTCT GCTGTAAGGA GGGGACGACT ATTATTCCAC  
 293801 TTCACAGAAT ATTTTCAGAT GAGGATACTG AGGCTCTAAG AAATCAGACA  
 293851 ACTTGCCTGA GTTGTTCAC TCTGGGACA TGATGGAAC GAGATGAAAC  
 293901 CCTGGCAGGC TGACTTGCAT GCACCTGCTC TCCTCAGGGC ACTTGGAATC  
 293951 TCCCTGGAGA GAATGGCTCC CACCAAGAGG CACCACATGG TTCCTTCAAG  
 294001 GTCTGTAGGG ACAACAAGTA CCTCCAGAAC CCTAGTAAGG AGTAGCCACC  
 294051 AGAAGCTTTG GAACATAGGC CCTCCGTCCC AGCCAGTCCT GAGCCTGCTT  
 294101 TCAGGAAGCA CGTTGGGAAT CTCAGATGAC TCTGCTCTGT TCACTCATAC  
 294151 CTGAGTGGCT CGCGCAAGCC CATTCAAGGC CTGCATCCCA GGAGGCTTGC  
 294201 TGCCCATGGC CCCCAGGGCA ACCGCCCTGC CAGCATGTCA CCACCTCCAT  
 294251 CAGCACTAGG CCCCAGCTCT GGCTAAGACC CTGAGGGGCA GGGCCAGGGA  
 294301 CCTGCAGGTG ACTCAGGCTG CTCTGGGAAA ATCCCAGGTC CTGATAGTTA  
 294351 CAGCTACTTG CAGGAAGAAC CACCTGGCAA TTCCTCAAAC TACCGAGCAG  
 294401 GGAGCACCAA GGGCAGGTGG CATCAGCTTG TCTTGAACAG AAGCTGCTAT  
 294451 GAGCTCTTGA TATCCAGGCC CACATGGCTC CAGGTAAACA GAGCCTTACC  
 294501 AGGCACCTGA TTCTAACCTG GCAGATATGT GGCCTGAGGC ACCTGAAGCC  
 294551 ATTAACAAGC GTGGTAATTG GACAATGATT TCCTCTTTAA AATTTAATAT  
 294601 AGTTAAAGTC CATTTCATAA ATCTGCCAAG CAGAGCCCGG CTAAAGTGGG  
 294651 CCTTTCCTTG ACCTGAATC AAAGGTGCTG GGAAGAAGT TGTCAGTCCT  
 294701 ATAAAAAGTT AATCAATTTT CAATGCAGAA ATAGACAAAG GGAAATTTCC  
 294751 ATCTTTGGAA GATTGATCTC AGGCATTATG GTTGATCTCC CTTTTATCGA  
 294801 ACACCTTTAC TTGCTTGGT AAGGGTCATT TTTTAAACAT TATCACATTA  
 294851 AATTGCCTTT AATACAGCAG ACCAAGCTGA GAATGTTAAA TAAAGAGAAA  
 294901 ATGCCTCTGC CCCCCCTCCC CCCACACCAA AATAAAATAA AATCATTTTC  
 294951 TTTCTTCTGA GATTTCTTTC TGAGCATTTT CCCCTGCAAG ACCTTCAGTT  
 295001 CCGAGCACAC TGGCTTCTGG CTGTAGCTCC AGCTGAGTGA GGGTGCCTAG  
 295051 AATTTCTACC CTTAGTTACC TTGGGACGTG TGGCTGATCA TGCTGGGCAG  
 295101 CCTCTGTGTC CTATGGCTCA GACCACAACC AGAGAGGAGT TTACGAGAGC  
 295151 CTATGTCTGT AGCCTCCGTG CCAGAGTCAC AAGGGTGGAC ATCTGTGTCC  
 295201 TGGGCAGGAC AAGGCAGGCA GGGGGGAAGC TCAGGTCTAG GTGGATAGAA  
 295251 CGGAGGGGTC TGGGAGTGTG CTGTGTCCAG GCAGCACTGC CTGCCATGGG  
 295301 TAAGGGCTGA TGGGTGGGTG CATGATGCAG CAGTGACCTC CAGCTCTATG  
 295351 CAGCTGGAAG CTGGCAGACC TCTGTCCCCA CACTGAGTTC AGCCACTGTT  
 295401 TGCTGGGTTT ATCCGATGGG GTCTTTTCTC TCCTGTCTCC CCATCTATAG  
 295451 CACACAGAGT TAGACAGGT GGCCTCAAGG ATTCCCATCT TAGACTGTCT  
 295501 GGGTCTGTCT GCCTAGACAA GGAAAAGACA CACCTGAGCT CTAGTCTAGA  
 295551 GTCTGCCCCA AGCACTGTGT GAACCTGGGG AAGCCACTTC CCCTCTCTGA  
 295601 ACCCCAGTTT TCTCATCCAT AAAATGAAGG AGTCAGACAA GACAAAATCA  
 295651 AAGAGCTTCA GGTACCCCTC AAGGCCCACT GAGCTGTCCC TGGATTCCCT  
 295701 CTTGGCCTGA GTCATTTTCA TCAATGCCTA TGAATTTGTT CTGCAACAAG  
 295751 TCTGGCCTTG TTCTCCTCCT CACCCACAG CATGTGCTGA AGAAGCAGGA  
 295801 CCTGGATGAA GACTTACTTG GTTGCTCACC AGGTGACCTC CTCCGATTG  
 295851 ACGATTACAA CAGTGACAGC TCCCTGACCC TCCGCGAGTT CTACATGGCC  
 295901 TTCCGTAAGT TGGGTCCCAG TGGGAAAAGG GCTTATTTCT GCAGGTGCTT  
 295951 CTGCACCAA ATGCTGTTGG GTGCCTGGAG TCTGCTCTCA GTTGTCTCCC  
 296001 AGGTTGGTTT CTTATACAGA GGAAAGCTGG TGAATTTGTT CTGCAACAAG  
 296051 CCTGAGCTTT AAGAAAAGAC TAAACGGAGA GTGGATGGGG CCAGAGAGGG

FIGURE 3, page 94 of 188

296101 CTTGCCCTGT TCCTTTTAA TAAAGATTTT TCTCGCTCTT TGAGGGGCCC  
 296151 AGGACTGTAA TTGAAGCATA GCTGTGAGGG CACTGTGAAC ACCCTTTGGG  
 296201 GGTTCATGA CTGAAGGAGA AGGAAGCAGA TTTTAGGGCT ATCCTCAGGC  
 296251 TAGGGCCTGG CCATGTGGGG AGCCCTACCT GGAGAAAAAC ACCCTGCAGG  
 296301 AGGGCCTGGA GGCTTGGCCA TGCAGCGGCA GGGAGCAGTG ACTACCCAAG  
 296351 GACAATGGAG AGTGAGGGTC CAATGTGAAG AGAGGCAGGG GATCCCTGGA  
 296401 GAAGAAGGGA AAGTGGGTGC TGTGTGAAAA CAGAGGAGGT ACTCTGAGTG  
 296451 CCCCTCCAAA GAGTGCCTCA TGCATATGCA AGTGGATGGG ATGCCTTCAG  
 296501 GACCTGTATC TTTTACTTGA GGTGATCTTC CAAGAGATTA CATTAACCAG  
 296551 AGGTGGTGCT GGGACAGGAC TTACAAGAAA TGCAAGATAC AAGAGCCATT  
 296601 TGTTGCTTAT CCACACCTTC ACAAGGCCTG AAGAGGGATC CTGTGTATTT  
 296651 GCCCACGCTG GAGACTAGAG GGGACATCCT TGGCCCAAAA GAGATGAAGC  
 296701 CCCTTACATT AGAAGATGTT CAAGCTCTGC TTAAAGTGGG CAATGCATAT  
 296751 ACCCTTGGGT GTGACCTGCC AGCTCACAGT TCCTAAGTGC AAGCCCTGGC  
 296801 ATTCAAGAGG TGGGTGCAAG CCCACCCAC CCCAGGGGGC ACTGAGTACC  
 296851 CTGAGCCACA GAGCCTGGTA TCCTCCCTCA ACCCCAGCCT TTACCTGGAC  
 296901 TCCCGTTTTT CAGCAAAAGTA TTCTGCTTC AGAGTGACAT CTCTTTGGGC  
 296951 TGTTGTCTTT CCACACCTTC ACAAGGCCTG AAGAGGGATC CTGTGTATTT  
 297001 GTTGGCAAGA AGGGCTCTTG TGGCAAAATAG AGAGGTACTT GGATGACATA  
 297051 AGAGGAGAGA AGCAAGCATG ATTCTTCCCT ATGGGCAGTG TCCATGAGCT  
 297101 TGACGTGGTT GCAGGGGCTT TTCCAGTTCA TATCATCCTT AGTACCAAAG  
 297151 TCCACCCAG GTTCCAGAGC TTTGCTTGAT TTAAGTGTGAC TGTGCAGGGT  
 297201 CCCCGTCATC CTCTTCCCG CCCACTAGTC AAACCTATAC CTGCCTATGT  
 297251 TGGTTCATAA TAAGGTGAGA GTGACTGGTA GGCTTATCCT GCTGCGGAGG  
 297301 TGTTGTCTTT GTGGGCCAAA GAGATTATTT CCAGAAATGC ATTTGGAATG  
 297351 TGTGGAAGTA TCCACAACCTC CCCACACCTG GTTCATGAGA GCTCATTGTT  
 297401 AAATTTTCAG GAATTTTACA AGCAAACAGT TAGACACTTG GTCGCTTTAA  
 297451 ATTGCCACAG TTGAGAATAT TTACATCATA GAAATTCACA CCACACATAT  
 297501 GCTACCAAAA AGGGGAAGGG GGGACATTTT TTCTTCTCTA GGGAGCCAGT  
 297551 TGTTATACAT TGACCTGCAT GTCCTGGAC AAGACCCTCT CTCCTGCCCT  
 297601 CGGAGTCCAC TTCTGGCAAT ATCTTCCCA CCCACCTCCC CTCATGAGA  
 297651 CTCTTGATG ATTCCATGGA ACATGAACAA CAGTAGGCTC GAGCAGCTAG  
 297701 GGCAGGTTAC AGGAACAGCA GCTCTCTGAG TCAGGAAAGC AGCAACATGT  
 297751 TCTCTGGGGA TAGTTCCAAG ACATTCCCAA AAACACTCTC TGAGCCTAGA  
 297801 CCCTCTGCC AAAGGAGTTA TGAAGGAAAA GCTCAGTGCA TTTTATAGAGC  
 297851 CAGAGGCCAA GACTGGACTT CAGGGATTG TGGGGCATAC CAGGCATCAT  
 297901 TACTTAATGT CCCAGATGCC GTCATCAAGC AGATTATAGC ACTGCTTGGG  
 297951 CACCATCTTG GTGCTGGTA CCATAGCAGC CTCTGCTTTA TGAGCACAGT  
 298001 TCCCATGAGT GGGTCTGGGG CCAAACAGCA TGCTCTTGGC TTTGCTCTCA  
 298051 AGGAAATGGA AGCATCCCTA TTGCCTATGA TGAAAGAGAA GGCCTCTCCA  
 298101 GCTTCCCTAG TAAGGTCATT GTAAACATGA GCTACCCTGG AAAGGGAAGG  
 298151 ACGTCATTAC CTGACCTCCA GCCACATGTC TCATACAGAG CAATGTGGTG  
 298201 TCAGCTCCCT TCGTTCCTGG ATTATTATTT GGAAAGCTTT ATAATCATCA  
 298251 TTTTAAAGC AAATTAGATT CTGCTGTGCG CTTGGAATTG TTTTGAACCA  
 298301 GACAGCCAAA CCATTATCA CAGCCAGCC CAAATAATAG ATATGCAATA  
 298351 AAACGTAAAC TCACAGCCAT TAAGGAAGCC GCAAAATGAG TTAACCCCA  
 298401 CTATAAAGGC TTGACATGCA GCCACTTGGA GCATACGGGG ATCAATGGTT  
 298451 TTTCAAAGTC ACAGGAACCT TAAACTAAAT TCCCATAGCT CTGGTAATAG  
 298501 ATTTATGGTT CAGCGAATTT TAAATAGGTA ATTGAAATGA GACATATAGG  
 298551 TACAAGTTAT TACCCAGCAA TCGATGGGCA TTAAAGAAAT CTCCTAATAA  
 298601 CCCAGAAAGT AATATCTCAA ACATTTTACG AACAACATTC TGGATTTAAT  
 298651 TTTAAAAACT AGAGCTGATG GGCTGGCAGA GGTGAGGCA TTAGCATTTT  
 298701 ATTTTCTAGT CTCTATTTTG CTGGCGTCCT TGGGTATAAG GCAGGGTGAG  
 298751 GTCTGTGGGG TGACTCCAGC TCAGTAGCCT ACCGATGCGG AGTCAATCGC  
 298801 TTTACTAAAG GATGATGGGT TTGGGGCTGT TGTACCCAGA GAAGGAAGTT  
 298851 GTATTTATCA GTTTTTGAGG TTTGTGGGGG TGGTCTCCTG AATCATGTCT  
 298901 TCCCATGGCAG CTGGCCTGGC CCTGGCTGGG CCATGCTTGC CACAGTCTGC  
 298951 AGCTGGTGGA GGGTGATGCT AGGAGTCCCA CAGCTGGTGG ATGTCTGTGC  
 299001 TGAGCTGGTT CGTGATGGGG CTGTACCCCC TTCCTGGCTC TGAGGAACAG  
 299051 GTGACTCTCC TCCAGGGTGG CAGGCAGTGC CTAGTCATGG GAGTCAGTTA  
 299101 AGTCTCTTTC TGATTGTCAG ATGGAGCCAA GGCTCCCAAT TGCCTCTCTC  
 299151 TGTACAGGGA CAGGAATGAA ATATGAGGGT GCCCCACTT CCTCCTTTTG  
 299201 TCAACTAAAC GTTCTCTTTG CATTGTTTTG GCTTCCCAAA CCACAGGCTG

FIGURE 3, page 95 of 188

299251 ATCTAGGAAC TAAAGGCTCA GTGTCCTTCT CCAGCAGTGC CCTCTGCCTC  
 299301 TCCTTCCCCA CGCCACCCCC CACCACCCCA ACAAGGAGTA GTGCCACCTG  
 299351 TCCCTGCCAT GGCAGAGACC CAGGCTCCAG GGTCAACATA AGCAAGGTGT  
 299401 GTGCTGGCCC TGTCTGTTC TACAGTAAA TTAACCTCAA AGTTGCTCAT  
 299451 CTAACAAAGCT TCTTGATGAT GCATGGTTTT TGCAGTGTTC TGAGTGCTCA  
 299501 GGTGGGATC AGGGGAAAAC ACGTTGCTAA AACAAAGGATT TTTCTCACTT  
 299551 CAAATTCATT GCAAGTTTCT TCTGCTTTTT AGAAAATAGT TGTCCTTTTA  
 299601 ATTACTCCTA TGAGATCAAA GCCCAGCAAT GTGTTGGATG CATGGGAAGG  
 299651 TTTTGAGCAG CTAGCAGATA AAGGGCTTCA CGTGTGAAGG TCCGGTGACC  
 299701 ACACAGGCAG GGTGTCAGGA GGACCTGGGG TGCTGAATGT AGGGGAGCCA  
 299751 GACACCTTTC CTACCTCTG ACATGTGTAA GCTCCAGGCA AGCAGAAAGG  
 299801 AAAAAGGTGT TTTTATCTAC AGCACTACCA CTACAGCCAG GGCAACTCTA  
 299851 TGAAACAGAT GATATGGTCA CCTGGTGAAT TTACATCTGT TTTTTCACCA  
 299901 TCTCTGTTGC AAAGTGAAGG GATGGTGCAG TTTCGTTTAC CACACCACTA  
 299951 TCCTTTGGAA CTAATAGTGC CTGGCCCCAT ACCAGACTTC CACACATGCT  
 300001 ATCTCAGCCA ATCCTCACAC CCACCTTGTG TTGAGCAGGA TGGTAAAATA  
 300051 AGCAACCGCA AGCATCCTCA CTACCCAGAT CTATCTGGCT CTTTATCTAG  
 300101 GTAGGGTGAG TTCAGACAAG GAGCTTAGAT GGCAAGGATA CTGCTTTGTT  
 300151 CTACTCCATT TCATTCTCTGA GTTTTGGATA GTAAGTAACA AGATTTTAAA  
 300201 TAGCATGGGG TTCATCAAAA ATTTTATCTG AATTTACTTG GCTCTTGAAT  
 300251 TTGGAGAGCA AGCAATGCCT ATGGGCTGGT TTCAGTTTTG GCTGAAGCCA  
 300301 AGACCATGGG TGCCAGTGAC TCCCCCTACC CCAAAGGAAG ACACTGGTTT  
 300351 TCCCACACAG GATTTGCAAA TAAAGTGGCC GAAGAAGTGA TTCCTGCCCC  
 300401 TTGGTCCCTC ATTTTCTCAA GGGCACAAAA CAGTTAAAGC TGGAGTGGCC  
 300451 AAGGGAGGAA TTGAAAATTG GCAGACAAGG CCGGGCACGG TGGCTCACGC  
 300501 CTGTAATCCC AGCACTTTGG GAGGCCGAGG CAGGCAGATC ATGAGGTCAG  
 300551 GAGATCCAGA CCATCCTGGC TAACATGGTG AAACCCCGTC TCTACTAAAA  
 300601 ATACAAAAAC TTAGCCGGGG TTGGTGGTGG GCGCCTGTAG TCTCAGCTAC  
 300651 TTGGGAGGCT GAGGCAGGAG AATGGCGTGA ACCCAGGAGG CAGAGTTTGC  
 300701 AGTGAGTGGA GATCGCACCA CTGCACTCCA GCCTGGGCAA CAGAGCGAGA  
 300751 CTCATCTCA AAAAAAGAAA TTGGGAGACA GAAGGTGTGA  
 300801 GTCTCACCAG CTCCTCCAG AGACAGAGTT GGGGGTGCTG TCCTGACTTC  
 300851 AAGTACATAG AGAGGGCTTC AAGGAGCCCA CTTCCACGTG AGTCTCCTGA  
 300901 GGCCAGCGCT GGAGGACAGG GTTCACAGTC AGTGTTCCAT TTGAATGACT  
 300951 TTGCTTGTCA ATATCGCCGT AGTTAGTAAT AGGCTCTTAG TACTCCAGTT  
 301001 GTATAAAGTG ATACCCAGCA TTAACTTGT GTCAGCACTG TACACTATGT  
 301051 CCAGTTTCAC AGATGAAGAA ACTGAAATC AGAGAAGTAG CTAACCCAAG  
 301101 ATCACATGCT CAGCAGGTAG CAGAGTCAGG ATTTAGTGGG CGTGCTGAT  
 301151 TCTAGAACTT TCTCATGCAT TTAAACAAAC TTTGCAACAC ATCTGCATTCT  
 301201 TCCGTTGAAG AGAATCTCAC TGTCCTCACA GTGATTTCCC TAAACTTCAA  
 301251 GCCCAACTC AATGGTCTTC TCCTCCAGGA GGTCTTTCTC AATTTCTCTT  
 301301 TCCTCCACCA AGCCCCACAC ACCTTCCTCT GTGTGCCAC AGCCCTGGGT  
 301351 TAACAAGGCT GTGGCCTGAT TATTAAGAGT GTGGACTCCA GAGTCCAAGC  
 301401 TAGACCTGGT TTTGAATCTT TATTCTGCGA CTGACTAACT GTGTGACTTT  
 301451 GGACAGTTCC CTACAGAGG TTAAACTGGG CTTTAATTTT CCCATCTGTA  
 301501 AAATGGGAAT AACAAACCGTG CACAGAGTTA TTCAGGACTA AAGGAGCTAC  
 301551 TTAATGTAAA GTGATTAGTA GCATGAGACT TTGCCTATAG TAAATATTAG  
 301601 GCAAACATTA ACCAGGTCAA TGATGGCGGC GGTGAGGGTA ATGATGAAGA  
 301651 TTTCTGTGTG TGCCCCATCA CCCTGTGCCA TGCCATTGTT GTCCTTCCCC  
 301701 CTCAGGGACC ACAGGCTCCC TGAGGATAGA GGCTGCTTCA CCCATCCTGC  
 301751 ACTCCTGCTC AGATGGGGT ATGGCACCCA GGAAGGCCTT GGTGAGGTT  
 301801 GCTCATTGAG GGCATGAAGG ACATGGAGAA ATACATCGGG CAAGGAGAGG  
 301851 AGTCCAGACA TGCAGCTGTG GCCAGCGATC CCAGAGGGTC TCTGCATGCC  
 301901 TCCAGGGGGC CTTGAGAAAA CAGGGGCAGA GGAAGTGCCT TGTGGGGGCC  
 301951 CCACAGCTGG AGCCCTTGGT AGAGAAGCAT CAGCCTGGCT GGAGCAGGCC  
 302001 AGCTGGACAT CCCCAGCCTG GACATCCCTA ATCACTGGAT GAGCAACTGG  
 302051 GTGTGAGGGA AGCCCTGCT TCTCACATGG GCTAATGATG CCTTATTGAA  
 302101 GATGAAAGTA ACTCACATA GAAAGCTCTC ATCCTGACCA GAGGGCCGCT  
 302151 AACTGGCCAT TCAACCTCC TCAGAGTAAG TGCTCTGGTC GGCTGGCAGG  
 302201 CTGCGTAATT ACCTTTACCT CCGGCAGCCA CGTATGCAGA GGAGGGCTCT  
 302251 CGCTTAGCCC GCTCCTCAGC CCTGCGTGCC TGCTGGCCTA CAGCCACATC  
 302301 CCTCGTGATG CAGCAGAAC TGGCTTCAGC AGCCCAAGAC CAGCAGCCCC  
 302351 ACCCGGCCCA ACTCCTGCCA CCTCACCTGG AGGTCAGCTT TGCTGGCTGT

FIGURE 3, page 96 of 188



302401 GCAAATCTGC ATACCTTCTA AATAATTTAT AGGCATAGAA TATGGGTTTG  
 302451 TATTTCCATG CTGGGCCCTG GCAGGCTGGC AAGGCAGGCC TCTGGAGCAA  
 302501 AACCGTCAGC CACAAATACC CAAGCTCCCC ACTGCAGGTG AGGACAAATG  
 302551 CGGAAGGAAG ACCACCGTGG GAAGGCCAGC GGGTCCGCC TGAAGCTACC  
 302601 GTAGGCTGAG GCTCTCTGAA AGCAGGGTGA GCTCCTGGGC AGGGAGGGAC  
 302651 AGGCCCCGTC TCATCTCCCA TCTGTACACT TGGCGTGGAG TGGCATGGAA  
 302701 GAGGCAGGCC ACCAACCTGA GCCTTTCAGA GGAACCTGAC CAGGGCAGGG  
 302751 AGAGCAGCAC AGGGAAAGGG TGAGGAATTG AGGTTGGGAA GCATAAGAGG  
 302801 AGGAGAACCA TGAAAGATGA GGTGGTGTTA GGTACAGCAA CGCACACAGA  
 302851 GCTCACTCTT GGGGAAGCAC TGGGCAGAGA CTCAGCTGTG AGCAAGACCA  
 302901 CAGCAGGCC TGGCCATGGG GAGCTTGCCA CCTGGGTAGA GAGGCAGCGG  
 302951 GTAGAGAGGC AGAAAGATGA CCCAATAAAC AAAGTAGGAG CTGAGAGAGA  
 303001 GCGTCTGGG TGCAGGAGGA CCAACTGTCC CAAGAGGTCA GGAAGGGACA  
 303051 TCGGAGTGGA TACCTGAACG CCGAGCTAGA GATAACTAGG CAGAGGGTGA  
 303101 GGAAAAGGT GTCCCAGGCA GGTGAGGGGA GCATGTGATC CCAAGGGACA  
 303151 AGGGGCTTGA CTGAGGGAGG AGGCAATACC CAGGGTAGAA AGGCCGCCAC  
 303201 CACAGTTAGG GCGCCGAGG CAGAACTCAG ACTCAGAGGC CAGGGCTTGG  
 303251 AGAAGGCCAG CTTAGCTCGG CTGTGAGGGG GACCTTCCCC AGCCTCTCCA  
 303301 GAGTTGCCCA GTGAGTGGTG AGTCCCCATC ACTGCAGGTA TGCCAGCCTG  
 303351 CAAGCCGCTG GAGAGGGGAC TGAGTATCAG CTGGAGAGCT GGACTTGGCC  
 303401 TTTGAAGGCC TCCGGTGATG ACTGTGGGA CAGACATGCA ACCAGAGCTG  
 303451 TTATTTAAGA CCTCCTAGGA CCTAAAGCTG TTATCTAAGA CCTCCTGATG  
 303501 TTCTGGGGTC TGGACTCTGT CCTTTTGGC TCTCCCTTGC TATATAAAGA  
 303551 CAGAAACACA GCTGAGTGCA TGCATCTGCC TCCACTGCC CTGCTGTGC  
 303601 AGGAAAAGTT GTCAGGAGCC CCTTGCCAAG TGTCTGATGA GTGACTCATC  
 303651 TGCATGAGGA ACAGGGGTGG CAGGAATGGG GCCCCCATCT GTGCACTGGG  
 303701 GTTCTGGGTG GAACAATCTC TGTCCCCAT TACACCACAG AGGGCTCAAT  
 303751 TCTGAACCAG AACTGATGAT TGCTGGCCAG TGCAACCCTGC ACCAGTTCCT  
 303801 TCTTCTCCCA CACTTGGAAG TTTCAAACCC AGACTGCCCC TTTCCCATCT  
 303851 CAATCGTTTA CTCTTAACAG CTGCATGGTG GGACCGGGCA CTTTCTAGTC  
 303901 ATTTCTTGGA GCTGAGTCTT CCAGCACTTT CCATTTTAA AGATCCCAGC  
 303951 TGGAGTTGT CAATGGCCTC CGTGCAGAGC AATTGAATAG CAGAAAATGA  
 304001 ACTAATTACA GGTGTGTTATT GAAAATCTAT TATATACAAA TTGCAAAGAA  
 304051 AACTCATTAA AATATGAAGC TTTGGTGATT TTTTAAACC CTCCTCTTGG  
 304101 AGGGAGAGGC AGGAACGGGG TGGCTGGAAA CCTTGTCTT CATTATTCTT  
 304151 GGGGTAAGAA CTCCCCCAGG AGCTGCAGAA CAGCCTCATG TTCATGTGTC  
 304201 ACACAGCCCA GCCTGACATC ATAAAGCTCG AAATTTTGCA TGCAGGAGAG  
 304251 AGCTCTCTGA ATGTAGTAA ATACTCAAAA ATGGCTGCAG AGGAAACAAA  
 304301 GAATTTTATT ACAAGATAT AAAATGAGAA CAATTTAAAT GTCAGCTTTT  
 304351 TACCAGGATA GCACCATATT GTCCTCATAA ATCTCCATGT TTTTGCAAAG  
 304401 CTTTGTGAG GACTTCAATG TGCAATTAAG CACTGAAGGT CACATTCCCG  
 304451 ATTTCTCAGC TTGCTCCCTT GGATTGGAGG TGTGACGGG CTTAGGATGT  
 304501 GAATGCCTGA GGCTTCCAGA GCTCACATCT CAAGGGAAAT CTTTGCATGG  
 304551 CCGAGGCTAC CTCCCAGGCT CCAGGCAGGA GCCCAGAAAC CAAACTGAGG  
 304601 GTAACAGGGA GTGCCCCCAA GCCCACTGCC TCCTTGGCCT GCCAGCACTG  
 304651 CCCTTGTCTC AGCGTGAGTG TGGGTGGTGT GAGCTCTGAG GTACCTAGTG  
 304701 ATAACCAGGT GTACTGAGGT GTAGAGAAGA CCCACCTTGG CATGCTTCTG  
 304751 AAAGGTAAAC CTTGCCTGAG GTTGTACCAG CCTAGGAAGG ATGCTTAGGG  
 304801 CACAATCACC AGTTCTCTAG CTGTGTGCTC TTTCTTCTT CTCTGGTCAC  
 304851 CTGTTCTCAG GCTCCATGAC AGTGCCCTGC AGAACCCAC CACCACTACT  
 304901 ACAAGGCCCC GCTTGTGGGC TGCACGGGAA CAAGCTGTGT CCTGGGGTTA  
 304951 GGGAGTGGTG GGGATGTAAG AGGAACTCCA CTCACACGGG ACATAGTGAC  
 305001 TGACTGGGTG AAGAGCTGTG GGCCACACTC AGGGCCAGGG CACTCAGAAG  
 305051 CCTTGGCACC AAAGTGGCCC CTGATAGGAG CTGGCTGGAG AGCCAGACCC  
 305101 TGGGGACAGA CAGTCCCTGG CTAGGCAGAG AGAGGCATTG GACACCTGAG  
 305151 CTAATACTGC CTGCCTGAAG CAGCAGATGA GGAGTGAGCT GGAAACCCCC  
 305201 AGAAGATAAG CCAGTGCCCC ATCTGAGATT TTCTCAGCAT CAGCAATACT  
 305251 GATCCCTGCT TATCGTGGCC CTTCTGAGC AGCTCTTTAG CCCCAAAGGC  
 305301 TAAGGAGCAC CTCTTCTAGC CCAGAGGCCA GCCATTCCCC ACACCCCTCAG  
 305351 TCTGGGTTGA GGACCAAGGC AGGCTGAGAG CAGGAGAGTC GCCAGGTGGT  
 305401 TGAAATATAG TCAGAGGCCA CAGGACTAAT GAGTGTATGC AAAGACGGCA  
 305451 GCAGGGCTAT ACAGTAACAA ACGCAGGAGG CACAAAAGGA CAAAGGGAAA  
 305501 GTAGGGGTGA CCTCGAAGAG CTGGCAGGGT GGTATGGCC CAAGGCTCTT

FIGURE 3, page 97 of 188

305551 GTTCCAGCGG GAGGACAAGA CCAGCAGAGC AGGGAAGAGG AGCCTAGCAC  
 305601 TTTCCATGTG GTGGGCATTC AGCCTGGCAC AGAGTAGGTG CTTGACAAAC  
 305651 ATTTGTCAAC AGGATTAAAG ACCATGGTGG ACTTTTAAAG AGTTGTAGTA  
 305701 AAGAGAAAAT GTTCAGAGCT GTTGTGGCAG TTCCCAGAGA GAATGAAGAA  
 305751 CAGACCTGAG GGTTCCCTTT GATGGTGGAA TCATCCTGTT GCCCACGTGT  
 305801 GGCATGCGCC GGGTGAGCAG CTCACCATGG TTCCACACAG TGGTCTGTGA  
 305851 GCTGATGGCT GAGGGGCAGA GAGGGGACAT GGAACCTGCA GTCACCCCTC  
 305901 GGTTCGGCAC CATGCTCCCG TTTACTCACT GCTGTCCTGG TGGGACTCCT  
 305951 GTTTCCCCCA AAGCTGGCCT TCCACGGGAC AGTGCCAAGC CACCCTAGCA  
 306001 CCCTTTATAA CAGAGCATCT GTCCTTACCA AATGCCTCCC AGAGGCTCCC  
 306051 TGGATACCAT AAGGAGGCCC GAGGTAAGAG GTAGAGTGGG ATTAAATGT  
 306101 GCCCTGCAGT AAAGTGTGTTG TACCCAAGTC TTATCTGATT TCCCTTTTTC  
 306151 GAAGACCTGT GAAGTCAGAG GATGGCAGAG GCTGTGGAAG TTGATCTTTC  
 306201 TGGGTATTTA TTTGTGTTCT TGATAAGCAG GAAGAGAAAG GTCATCACAA  
 306251 GTGACGCTG GAAATAAACC AATGGGAGAT CTTCCCCGTG GATGGAGGAG  
 306301 CAGATGTTCT GAGTCTATGT AGAAGGGGGC ACACGTAACG GCCATATGTT  
 306351 CAGAGCCCCG AGTTCTCATT TAGCTCACAC AGGATTGTTG GGGGTTCTGG  
 306401 AGGTCCCAGG TTTTGCCTT TACATATGAA GGCTGATAGC ATCTTTGGAC  
 306451 CCTTGGGATC CATATTTTGA CTGGGACAAG CGAACGCTCG TAACTAGTTT  
 306501 GTGGAACATAT AGGCTGGACT CAGCACAGGT ACAAGCAGAA GAGTTTTGTT  
 306551 CTCCTCTGCT CAGACTTCCC GGTGAATCCA AATCTTCCCC TGGCTGTGGG  
 306601 CTGAGGAGGG TGATGAGCTG AGGACCGCTC AGCAGTTTGG TCGCCAACAC  
 306651 GAGGTGGCTT TCTGTCACTA TTAGCTTGG GGGTACTTGG TAATGGCTTT  
 306701 CCATTTTGGG CTTCCACTAG AATTCCAACA CTGCAGCAAC AGTCCCATCC  
 306751 CGTGCCCCAC TCCCCATCTA GATCTTCTCA GGAAGGTGC AAGGAGGCCT  
 306801 CTGTGCGAGC CGCCTGGGGC AGCCTGCAAG CTATGCCCTT GGAGAGCCGT  
 306851 TCTTCTCCAG ATGGCATGGG CAATTTTTTCG TCAGACGGTG CTTCAGGCAG  
 306901 AACAACTGTT TATATACTTG TTGGGACTGC AAAACGCATC CAGGTGGGGT  
 306951 GGAATGGGGC CCCAAAGGAC TCTCTCCCCC TCCACAGGTG GTGCGATGGG  
 307001 CAGTGTATGG AGCGGCACCT CCAAGCCAC CCCACATTCT CCATCTGGGT  
 307051 GCGCTCTCTG GGCTTACTCA TCTTCCTTAT CCCCTTCAGA CAGAGCCTCC  
 307101 ACTAGCTGAG TCGTATGAC TCTCCAGAGC CTGTTGCTTC CCAGCAAACA  
 307151 CTGCAGGCTG CGTGCTCACC ACGTGCCAGA TGCCATGAGA GGCATCTGGC  
 307201 AGGCAGAACC TCTCTGACC TCCGAGTTCC AAAAATAAGG AAACCAAGGC  
 307251 CCAAGAGGTG TGGGGCTGCA GAGCCCAACT CACAGCGAGG TGTGGCAGTT  
 307301 CTAGACCTGC GCACTTTGGC AGGATGCTGG CTGCACTTCT GCTCCAGCCA  
 307351 CGACTCTTTG GAGTCTTTGT GTCTTCCCCC ATGATGTGTG ACTCTGGGGT  
 307401 GGGCAGAGGG TGGGCTCAGT GAGACAGACC CTCTCTGGGA GCTGTTTACC  
 307451 TGTGCTGCGG TCGATGGCAG GGCCCTGAA GTGGCATCCT TTCTGAGTCC  
 307501 TGAAGTCCGT GTGCCACAGG TGTTTTTACA CACATTTCAC CTGGGTCCCT  
 307551 TTCAGATGAC AGTGTGAAAG GAGCAGGATT ACTGTCCTGC AGAACCATAG  
 307601 CAGTTGACGC CTCCAACCTC CTGACAAAGC TCAGGGCTTC CGGCTCCACA  
 307651 GAGAAAGCGG GGCCCAGACA GCAGACCTGT TATTGAGAAC AGGTGTCCCG  
 307701 TGGAGGGCTG CTTTCTCTCA AACCCAAACC CCATCAAATA TCCACTCCTT  
 307751 CTCAGCTCCC ACAATAAAT GCACCTCCAG AGACTCCTCT TCTGAGCCAC  
 307801 TTCCAGCCCT GGTGTTGGTC CTGACCCTCA ATAGTCTACC TCTGTGCCAT  
 307851 GGTGCTTGGA AATGTGCTGA TGCTTGGCAG CAGGTTCAAC ATCAGGGAAA  
 307901 CGATGGCTTG GAAACAGAAG TCACATCCCT GCCTTTCATG GGTGTTGAA  
 307951 ACACCCATCC CTCGGTAAAT TGCTGACACC TTGGTGAAAG CTGACAGCCT  
 308001 TCGGAGGAGC TCGCAGGAAG CCCAGGCTG AATACTGTCC AGGCCAACTG  
 308051 TACCAGGCCA CAGCTGGGGA GGCCACTGCT CCATGCTCAG GGCACAGTAG  
 308101 GGGATTTAAG GGCAGTGGAG TCGACTCCTG GTTGGCTCAG ACAGAACAAA  
 308151 CAGGGTTGGG TGGGGAACGG GGCCTAAAAG TACTACAGGT TAAATAACTC  
 308201 AGCATCTAGA AAGCTCTAGA ACAAAGCTAG CCCAGGGCCC TGCCACCCCT  
 308251 GACACCTGGA GGTGCTGAGT GAAAGAGCAG ACTTGTTAAC AAGCAGACTG  
 308301 TGTCCCTGTG GGAGATGTGG CCACCATGTC TCCTTCCTCA TGTCCCTAG  
 308351 TGCAGAGGGA GCAGAGTAGG TGCAAGGTAC AGCTGGATCC GGCCATCCTG  
 308401 CATCCCGGGC CTCACCAAC ACCCTTGAGG CTTGAGGGCT TAGGGCACTT  
 308451 ACAGAATGCC TGTCTGTGA ATGGTGGCCA AGCGATGGAC AGAGCTTCCT  
 308501 GGTAAGCTA AGGGCTTCTG AGTTTGGGAA AACACAGAAA ATATGGAATG  
 308551 TTCCGTGGCA GAAGGGCCAG CTGTGAGGAA GGTGGGGCTT TGGAAAAGGA  
 308601 GCAATAGTGG CCACACCTTA AAGGCAGCCC TGGAGGCAAC CCAGTGTGTC  
 308651 TCAGGCTAAA TGCAGATGTC TGCCCTGTAG ACAGTGTACC GACTAATTGT

308701 ATTCCATGCA GTTCAAAGTT CTGCTCATTT TTCCTGGGTC TCACCCTCCC  
 308751 CAGCCCCCCA ATCACAGAGC ACCATCTCTC CCTTGCCCTC AACTAAAGAT  
 308801 GTGCCACAC CTTCCAGAC ACAAGGAGGA GCGGTGATGG GGCAGCCTTT  
 308851 CAGGGAGCTC TGGCTTCTGC TGGTTGGAGA AGCAGTTGGT AGCTGCTTCT  
 308901 AATTGGAAAG GAATGCCAGT GGGCTTCCCC TCTGGATGCT TCCCTCGAAT  
 308951 TCTCTAAATT AACAATAAAG GCCTGGGCTG AGCAGGGCCC CCAGACCCAG  
 309001 AGTCAGCTCT CCATCATTCA GAGGCTGACT GTCCACTTTG GAAAATTCAT  
 309051 GCCAGACTCT CCACAGCCTC CCTGCCTCCC ACCTGCCAGC CGCCGCTGG  
 309101 TTAGAATTTG AAGGCAGCCC ATGTGAAGGG GAAGCAGAGA CAGCACAGGG  
 309151 TGGGGGAAAC TCAAAGCAAC TGGATGTGCT GCTGGTTAAG GGCTCTGGGA  
 309201 AGTAGTGGTT TTTGAGAGGA GGGAGGAAC CAGCATTAAA TGGACATAAG  
 309251 GAGAGAGACT GGGGACATCT GGCCATGTAG GCCCTTCCTG AGCCTTCACA  
 309301 CTCATGTGTG CACCTCCCTT TGAAGTCAGG AGAGGTAATT GATCTTGCCG  
 309351 GACTCAGCCC AAGCCTATGA TCCCTGCCCT TGAGACCACA GGCCCCAGCC  
 309401 CCTCTGTAAG CAGCCCTGGC CAGGCAGCTG AGCAGATGAA ATATTCCAG  
 309451 GCCCCAGAGT GAGCAGTGTG ACTTTAAAAA GTCTGTGTTA GACTAGACTG  
 309501 ACTGACCCCA ACCTGTTTCT TTTGAAAACA GTGTCTCAGA AGGCTCAGGC  
 309551 CCTTACAAGC TCTGTAACCT CAAATGTCTA CCAAGATGCC CAGGCTGCAG  
 309601 GGAGTAGCCC TCATCCCAGG GGAGAAGTGC GGTCTTACA ATGGCACAAC  
 309651 CACAAAGGCT CTGGCCGGGG CCTCAGTCTC ACCAAAGGGA CTTGGCCTCC  
 309701 TGGTCTCCAG CCCCAGTTCC TGATCCTCAG ATGAAGATGT TCTGATGCCA  
 309751 TGGGCACTTC CAGGGAGAAT GGCTGGCAA GTGGCTGTCC CTCAGTTCTC  
 309801 TGCAGAGGGC AGTAAGCTTC CAGAGCGAAC TGAGACACCC CCGCAGGTGC  
 309851 CACATGAATC AGCACCATGG CTGAGTTTCC TGCTCTCAGA TGTGACAGAC  
 309901 ATGGTCTTTG AAGTCACAAA GCCAACAGGT TAGGAAGCTT TTGGGCTTCA  
 309951 GCTCTGAGTA GGCAGGAGTT TAAGGAAACG CCCCAAATTG AAGCAACACA  
 310001 ACAGGTGAAT ATTTGCTCTT ATGTATCCAT TCATGCCTAC CATCTGCCCC  
 310051 AGGCAAGTTC TGGACTGAGC CCTGGGAAAA GAATGGTGAT GTGACAAGCC  
 310101 TGGCCCTGTC ATCCTGTCTG CAAGTTGATT ACTAAGAAAC TAGTCCAGGG  
 310151 CCCACAGTGG GGAAGCCAC CCACGATGGA GTGTTGGCTG GATGGGCAGA  
 310201 CACTTGCCCC GCACCTGGTG TAAGAGTATC ACACACCTAA GGAGCAGAGC  
 310251 ATTGCAGGGC TCACCATGTG TTGCAGAGCT TGCCTCTGAA GCCACATAAT  
 310301 TAATTTTCAAG TAATCATACA GCATTCATAG TTGATGCTAA GCTGTTCTAA  
 310351 GTGAATTCAT TAATCCTTGC AACAATCTAT GAGAGAGGAA CTATCGTTAT  
 310401 CCCCTTTTTA TAGATGAGGC CCAGAGGCAC CATGCTAGAG TAACTTGCCC  
 310451 ACCTCTCAGC TAGAGAGTTA CAGGGCAGGG TTTGAACCCA GGAGTTCAGC  
 310501 TTCCAAGCCT GTGTTCTTAC CTACTAAGCT ATGCTGCCTC TCAAGTCATT  
 310551 CTAGACAATC TTGGTCAACA GCGTCTGTTT CGGGAGACCC CTTGTGTGCC  
 310601 TCAAACCTGG CAGGTACCAG TGGCTAGGGA TAGAGGACTG CTGGTCCAGA  
 310651 TGAGGGATGG GGGACTGTTG GTCCCGACGC TGCGCACCCC ACCTGGCATC  
 310701 CTGTCCCACA AGGGCCAGCC CATCAGAAAC ACCCTGGCTT CTAGAACTCG  
 310751 TGCTACCCAG CAGAGTCCAG GAGGGACTAC AGTGAGGCCT CAGGTGTCCCT  
 310801 AAATCCCAAT TGGCAAGCAC TTCTTGAGAC TTCATATGCC CACTCTAGAT  
 310851 TTCTGTGAGA GTGCGGCCA GTCAGGTGCA CAGGATTCTC ATGAAGGAGG  
 310901 CAGGGAGCAG GAGGCTGTGG CTGGTGGCTG TGCTGTGACA TTTGTTATTA  
 310951 CTAATAACAT TGACTGAGTG TTAAGCAGCT TAACATTATC TCATTTAGTG  
 311001 ACATTCATC CTTATGAAAA GATACCACGT GTCTCATTTT AGAGGTGAAG  
 311051 AGCCGGAGAC ACAGAGAGAT TAAGTCATTG CCTGCGGTTA CCCAGTAGAC  
 311101 CAAAAATTCC AACCATGCA TGATGGCTCC AGCACTCCAT CAGCACATCT  
 311151 GATGAGGCCA CCTGCCACCC ACGAGTCCCA CCGAGCCTTG GCTTGAGGAC  
 311201 AGGTGGGAGC ACCCTCCTCT GCCCCTGGAA CCCTGGGGCT CACACATTCC  
 311251 ATCTTTGTGC CTGATTAAAT CATGAAAACC AAGTGTCTC TTCTTATTCA  
 311301 GGAGGTTGAT TCTTCTCTG TCTGGCAGGG ATGTTGTAAT AACCAATTAA  
 311351 TACGCATTTG CAAAATGCTT TGAGATCCTG CACGTAGGAT ACCATTTGTG  
 311401 CAAAATCAGT TTTTTTGGTA AACTATTTG ACATGAAAAA TTGTCCTTTT  
 311451 TTCTCTGTGA GAGAGCTTTT TTCAAATG CCTTCCATCA AAGGGTGCAA  
 311501 TTATGAACTC TGAAGACTT CCTGATACCA TCAAGGTAGG CAGGTACTCC  
 311551 CTGCCCATGT GACCTTAGAG GTGCCCCCTC AGAACCTACA CCTGAGGCTG  
 311601 CAGTGTGCCC ACCAGCCCCA GCCCCAAGG CAGGCCTGCA GGTGAAAAGT  
 311651 GCTTAGCCCT GGAGGCAGTG TGCGGTCATT CACACAAATA CTCTCTGGCA  
 311701 GGAGCTGTTT TAGGCTGCAG AAATTCAACA GGTTCACA CAGACAAAAA  
 311751 CTCTTGCCCT CACGGAACCT GTATTGCAGG GAGGAGACAC AGATAAACAA  
 311801 CAATGGATGC GTAGATTACA ACGTGGGTAG TACTTTTGAG AACAGCAACA

311851 CAGAGGGCAG GGTAGGGCAG GGCAGGGCAG GGGTGGGCAA AATTAAATAC  
 311901 GATAGCCCGAG GGAAAGCCTC ATCCAGAGGG GCTATGTGAG CCAGGTGTTG  
 311951 AAGGGGTGAG GGCACCTCGCC ACGCAGTCAC TGGGGGAAGA TGTGTCCTAG  
 312001 CCCCTTAGGT AAAAATAGGT CTGATGGTAG GAGTGGTATG GGAAGCTGGG  
 312051 GGCAGGGTCA AAGGTCCTGG GGGCCCCTGG AAGCTAACCT AAGCACTTTT  
 312101 GTTTTCACAA TGGGTGAAAC TAGATTATTG GAGGGCTTCA AGTCGAGAAG  
 312151 GGATGTGATC TGACTTTATA TTTTAAAGGA AGCACTTTGG CTGCTGTTTT  
 312201 GAGAAAAGAC TGTTACAGGG CAAAAGTAGG AGCATGTAGA CAAGTTAGGA  
 312251 GGCTGTTGCA ATAATTCAGC TAATGGGCAC GATGGTGGTG AGGAGAGGCT  
 312301 GGATCATGGG TATATTCTGA AGGGCGGTGC CAAAGAGATT TGCTGATGAG  
 312351 TTGCATGTGG TTATTAGAAA AGAAAGGAGT CCAGGATAAC TCCAGGGTTT  
 312401 TGGGCATGAG GACTGGAAGG ATGGAGTTGC CATTAAGTGA GACAGAGGAG  
 312451 ACCATGGGTG GAGGAGGTTT GGGAGGGAAG ATCAGGAGTT AATTTGGGGG  
 312501 CATACTGAGT TTGAGATGCT ATCAGACATT CAAGTGGCAG TGTGAACAG  
 312551 GCAGTTGGAT AGACGAGGAG AGGGCTAGGC TGAAGATGGA AACTTGGAAG  
 312601 CCCTTAGCAT ACTGACAGCA TTTAAAGCTC TGAGTTGGAT GAGATCACTG  
 312651 AGTAGGTGAA TGTGGATAGA GAAGAGAAGC CAAGACAGAG CCCTAAGAGC  
 312701 CTCTGATGGG AAGAGGTCAG GAAGAGGAGT GGGAGCCCCA AAAGAGAATG  
 312751 AGAGGAAGAT GCCAGAGTGG TGGGAGGAAA CCCAGGCAAG TGCAATGTCC  
 312801 TAGGAGCCAA GAGAAGAGTG AGTCAGGAAG CGGTGAGCTG TCCCAAGTGC  
 312851 TGAAAGCTCA GTTAAGATGA GGACAAAGAA AAGAGACTTG TATTAGTCAT  
 312901 TTGGAGGTCT TCGGCTTGAA AGGCAGTTTC CACGCAGTGG GATGGGAGAG  
 312951 GGTACAAAAG TCTCATTTGA TTGGGTTTAA GATGGAGTGG GAAGAAAGGA  
 313001 ACTGGAGAAA CTAAATGAAG ATAAATCTTC TGAGGAGTTT TGCAGCAAAG  
 313051 AACAGAATAG GGCAGTAGCT AAAAGGATAG CAGGGCCAAG AAGGCTTTTG  
 313101 CAAACACACG TGAGCAACCG GCATGTCTGT GGATGAGCAG AGTCAAGTAG  
 313151 AAAGGGGAAA CTGAGGCTGT GGAAGGAAGA GGCAGTACAA CCAGATGACT  
 313201 TCTTTGAGTA GGCGAGGGGA GGTGGAATCC AGGGCCCAGG TTGGGGATTG  
 313251 TCTTAGATGG ATGGGCGGCA GACCCAGTTA ACGGGAAAGA AGCCTGAGAG  
 313301 TGTGAACCGA CAGAGATGGG TGGGTCGGTG TGGTGGGTGC GTGTGCAGAC  
 313351 GTCTGTTTTT TCAGTGAATC AGGAAGCAAG GTCATGGCTG AGCGTGAGGA  
 313401 TAAGGGAAGA GATGTGGAAG TCTGAGGAGG GAGAAGAAGG TCGGGAACGA  
 313451 TTGTGTAGGA GAGTGAAAGA GGGACAGATG CAGAGGAGGC GGAGTGATCT  
 313501 TTGGGCAGCT TTCGGGACCC ACTTGAGGGC CCTAGTCCTG AATCCAAAGT  
 313551 GAGACTAGTC AGCAGGGTGG CCGTTTCCCC AGCATGTTCA GCTACCCGGG  
 313601 TATAAGCAGA CAGCACCCAG ACAGATTTCA CCAGGGCTGG AGGGTTGTCA  
 313651 AGAGAGGGTA AGGGAATTGA GTGTGTGCAA CAGTATCATT CCAGTGATTT  
 313701 AAATTCATG GAATTCATG GTAAGGAGGA AGCAACATCA CCACAGGTGA  
 313751 CAGGCATACA GTTGGTCAGT AGATTCCCGG TGGGGCTGAA GAATTCCTTG  
 313801 AGTCTGGATA CCAGACAGAA TAAACCAGAA GAGATGGGAG GTGATCAGAG  
 313851 AGTAGGATGC CTGTAGATAT GAGTTTTTCAG GCTGCTATAA TTTGTAATGA  
 313901 CAGTGTCTGG ACTCCAGGAT ATGGCCACCT GTAAGGTGGA GAGTTGGCAG  
 313951 GTAATCAACT TGGATGTTTA AATCACCTGG CACTTACACA GGTGGCATAT  
 314001 AAGGGAGACT GCTGTTAGCC ATAGGCTACA ACACAGGAAA TGGGGTGGGG  
 314051 CATAACCCAG AGTCAGCAGG TGAATGCAGC AAAGAGGGGC GGTGGGTGGC  
 314101 ACGTGGAGCA TGCACGGGGG TTTCCCTTTC TCCCTGAGAG CAGGTTCTCT  
 314151 GAGGCAGGGT CTCTTTTTAT GCCCATTTTA CAGAAGAGGA ACGGAGGCAT  
 314201 CAAAAGTTG CACGTGGTGG TAGAGATGAA ACTCAAATCA GGGGATGTCC  
 314251 TCCAAAATTA ACACCCTGGA CACCACACAG AGTACCTTCC AACACAGACA  
 314301 GGTTGACCAT GAGTAAGATT TGGTCCCTGG CCCCAGGGAG TCCACTCTTC  
 314351 TATGGGAAAA CAAGACGTGT GCAAAAACAA GGCAAAAGGC TGTGGGACGG  
 314401 TTGCCAAAAA AACGCCATGG AAAGTGAGAG GAGGGGTGAA CACAGCTAAG  
 314451 CAAAATAATG CTATTAGTCT TCACAAAGGA GGGCACGATG GGATTTTACA  
 314501 GGCAGGTATG GGAGTGGGAA AAGGCATCCC AGTCAGAGGC AACAGCCTAA  
 314551 GCGTAAGAAC AGATGGGAAG GCTCCAGACC ATCTAATATG GCCAATCGT  
 314601 CCCGTGCCAT GGACAAATAA AAGAGAAGAA ATGATGCAGG AGGGAGGGAT  
 314651 TAGAACGATA ACAGCAAGGG CGTGTGTTAG GGAGCTAAAT GCAATCACAC  
 314701 ACAACCCCA AATCTCAGGG GCTTAGTGCA ATATTTATTA GTGCAAAGAT  
 314751 TTGTTCTCCA TTCCTGTAAC AGCTCAAGGC TGGTGTTCAG TTTCTGTGCA  
 314801 CACAGTGACA TGGGGACTCG GACACCTTCA GGATGTGGTT CTTCCGCTCT  
 314851 CTGGGGCCTC AGATTCTTTT ACTGGATGCT GCATCTGGCC GGTATACAGT  
 314901 AGGATGAGGA GAGTAGAGAG GCTTGCAGGA GCTGTTTTGG AGCCAGCAA  
 314951 AGCCCTTGCA CCCATCCCTC CTGACACATT CCACTGGCCA GAACTCAGTC

FIGURE 3, page 100 of 188

315001 ATATGGATGC CTCAACTACA GGAAGAGCTG GGAAATGTAG TCCAGCTGTG  
 315051 TCCACAGGAG GGAATGGATG CAGGTTGAGG TGAACACAGA GCATTCTCTG  
 315101 CCAAAGACAT GCAGGCCACA GAGTTTGGGC ATGTCAAGGA AGCCAGGGAA  
 315151 GCATGGAGGG TGTGGTCAAA GTCAGTTTGA GGAGGACCGA CCTGTAGACA  
 315201 CCCACAGGGA AGAGTGAGGA CTAGGAACT CCAGAGACTG TAGAAGACCT  
 315251 GAACACAGAT GCAAAAGTGG GAACAGAAAA GGGCACAAAA AGAAAGATGA  
 315301 TTCTGGGAGG CTCTTGTGGC CCTTGCGTGG GGTGGCGGTT GGGAGAGAAG  
 315351 GAGCTGAACA GTGAAGACCA TTCCGAGAGT TCGCCACAGG GCCAAGATGG  
 315401 CCGCCTGCCT CTCCTTCTTA GCTCTGGGGG TGCCGGAAGG CAGGGTCAGG  
 315451 CCCTGTGGAG ATGGAGTGGC GGGAGGTGGC TGTGACGGTC CTCCGAGTC  
 315501 CATAGCCTGG CCCCACAGAG GGGAGAAGAA AGGATCTCTT TTAATTTTCT  
 315551 TCTCAGGCCT CCACCTGACG AAGGAGAAAT ATCACCACAC ATTGTTATCT  
 315601 CTCAGAAAT ACTCTCTGGA ATCATAAAAA GGGAAATACA GTGAAGCTAG  
 315651 ACCACGAAGG CTGCCCTTA AATCAGGAGC TTCTAAATTA TCACAGTGGC  
 315701 GCTCTCTAAT TCCTCGGAAT GAAAACATTA AAGATGACAA TGTCCCTTTA  
 315751 AATCAAAATG CTTGGAGTT GCTGTAAAGA GTCAGTGGGC TTTTTTTTTT  
 315801 CCCTTGTGAG GATTTTTTTT TTTGTCTCTT TTCACCTTAT AATAAAATAT  
 315851 AAATCATAAC TTGTGGGGGC AGGCTCTACA GAGCAAGCTG TGAACATGGA  
 315901 TTTTCTGAAA ATGAAGGTTT TTTTAAATGG GAATCATCTC ATCTCAGGAA  
 315951 GCATGAGAGT CTCAAATGAT GAGTTTGCTA CTCACACTT TCTTTTTTTT  
 316001 TTTTTTGATT CACAGGTGGG CCTCAGGCCT AGCTGTGGCA CCACTGTGAT  
 316051 GAATCATGAT GGCACACCC AGGAGGCCAG TGGGCTGACT CAACCCCTCC  
 316101 TGGAGCGGCC ACTGTGCTCA AGCTGTGCGA GGTAGGGGCA GGGAGGCACA  
 316151 GCCTTGGGAG GTAGCATGTA GAGGCAGGAG GACTGGGGCC TGGAGGAAAG  
 316201 GGCATGGTTC ACACCCCTTG GCCCCTTCCA GGCAGGCCTG GTGGTCTGAG  
 316251 CTCTTGTGCC ACAAGAGAAA CCCAGAGGCT AGTGCAGCCC CAGGAGGAAG  
 316301 GGTGGGAGC CACGGGTCAG AGAAGGCTGC ATGGCAAGGT GGACTTGTTT  
 316351 TCTGCATTCT GGTGTGGAAG AGGGGTCAGA GATGGAGAAA GAACTGGCGA  
 316401 GTTGACCCAG GCTCGGGAAG TACCAGGGCA GCACGACCC AAGGGTCTGC  
 316451 CCTTGGTCTG CCACTCCCTT CTCTCTGCGA TCCTCCATCT GCCAGTGCCC  
 316501 ATCTCCATGG GCTGGGTGGA GACTCAAGGC CTGGCAGGGC CAAGTCTGGG  
 316551 AAGCTGCTGG ACAGTTGTAA CCAAGGTAGG AAAGCAGTCT CTGATATTTT  
 316601 AGAAAAGTGT TCAAGGCTTA GGTCTGAAAT CGCAGGGCTT GCTGATTAAA  
 316651 ACATGTACCC TATGGCCAC AGCCCTCTCC CCTCCACTG AACTAGCCAA  
 316701 GCATCTTCAG AAAGGCTGGC TCTTCTCATC AACTCCATGG CCTTCATCCT  
 316751 GACCCCTGGC TTCCCTCTGT GCTCCGTCCA CACCCTCCCC ACCTCCCCTA  
 316801 CACCTGTACA GGAAGTGAAG CCTGCAACAG GTCACCTCTG CCCTGCGGTT  
 316851 GGCTTAGGCA GAGAACAATC CTATCTTTAT CCAGTCTGAC CTCTCTGCAG  
 316901 ATCAGGCCCT CCGGACCTCT CCCTCCTTGA GACGCTCATT TGCTCTCCAC  
 316951 CTTTTTGGCC ACCTGTTCTC CATCTTATT GAAAGTGAGC TCCTTTCCCC  
 317001 TGCCAGCCCC TTACACTTTC TTGGTAGAGA GCCAGGATGT AGGCATCTTA  
 317051 GGCTTGTGTA GCTATACAGT GTCTACCACA GCCACTGAAC TCTGACATTG  
 317101 CAACGTGAGG CAGCTGTAGA TAAATGTAA ACAATGAAT GTGTCTGTGT  
 317151 TCCAGTAAAA CCTGATTTAC AAAACAGAT GGAGGGCCTG TCTGAGACAC  
 317201 TCAGGTGCGC TGCTCCCTC AATTTACTCT GCCCTGGGGA GGGTCTTGTC  
 317251 CCACCCACGC CTCCAGACAT GAGGTTTCCA GCACAGGTC TTCAGAAGTC  
 317301 CCTAAGTCC AAGGGGACCA AGAGGTCCAA GGGTCATTAC TTAGAGGCAC  
 317351 CACACACTTA GTGTGACTCA ACGGCCGCT CTTCCTCCAA ACTCCCTCC  
 317401 CCTCCTGTGT CTCCTGTCTC ACCAACATAC TTTCCCTT CCCATTGTAC  
 317451 TTCTTTTGTG ATCGGATTGT TAAGTGCTTC CAAGTGGGCG GTTGAGTCTT  
 317501 TGAGAGCTGC ACGTGACCTT GAGCGCAGGC TCAGGAGATG GGTGGGAGT  
 317551 CGGAGACGGA GGCTCTAGGG AGACTGAGGG GCTGGGAGAT GCGGCACAAG  
 317601 AGTGGGAAGC CCAGCACTGC GGACTCACTG GGCTCGATCT CCTCCCTGAC  
 317651 GGGCTGGCCA GCATTGAGT GTATTGTCTT TTCACTGGGG TCCACAGGG  
 317701 GGTCATGTTG AAAAGAAGCA GCCACATTG CAGGCGAGGG ACCGCGGGCC  
 317751 AAAGGCAGGT GGGCTGGAGC CATGGGCCCC TGCTGCGCG CCTGTCCATC  
 317801 CCAAGTGTG CTGAGGTGAC TGAGCTGAGG GCAGTGCTTA GAGCCATCCA  
 317851 AGAGGGCTCC AGGGGCGGG ACTGTGTTGG AGGCCACATG CCACCTCTG  
 317901 CTGTGTTTCC TGCTTTACCT CATCTAGGA GACCACACAG CTTAGGCATA  
 317951 ATGCCATAGC CTAAATTTCA GGGGCTTCAG ATAGCCATGT CATAATCCAC  
 318001 AGACCCAGTG GAAAGTACAA CTCCTGGGG CCCAGTCGC CCGTGTGGGA  
 318051 CCCCTCCCCA AGGCTGCTGG CCGTGTGGGA AGCAGGGATG CCAGATGAAG  
 318101 AGGGAAGACC CAGGCTGGAA GCTTGCCTT ATCTCCATGC CACAGAGGCT

FIGURE 3, page 101 of 188

318151 CAAGGACTCC CCGATGGCCC TCACAGGAGC TCTGCCCCCA GCTCCATTTT  
 318201 CCTCATTCGC CCAGTGTGG CGGCAGAGGG CATCAGCAGA GGTGCAGGCA  
 318251 TTGCGAGTGC CCTCTGATGC AGCTCCAAAC ATTCTGTTC CTTAGAGCAG  
 318301 CAAACAGTCT CACCTGTCTC CTGCTCATCA TGGGTACATA AAATCCCTG  
 318351 TTGTTTATTC ACTCTCCTCC TCACAGTCTT GGATGGCAAG ACACAGTAAT  
 318401 TAATCATCAG GCTGCTTTTG CGAGGGGCCA CACCTGCTG GTGCTGCACC  
 318451 TGGGCAGCTG CCTAACAGAT TGGCTGCCGA AGGTTGTTC TGAGGCTGAA  
 318501 TTCTTGATCT TGGCCACTCT CTCGGGGATG GAGAGCCATC AGCACCCACT  
 318551 TTGCACGCAG GCCTCACTCC CGGCACACTC TCAGAAAGGC CCTGGAATTT  
 318601 ATTTTGCCCA TTTGAATACA AATGCAATTG AGACAAGATT CTTTTGTTC  
 318651 CAGAAGTCAT TGCTTCATTT CTGTTTCTCG TCAAGTGAAC TGACAGCCAA  
 318701 AGAGAGTTGA AATAACAAC TCTGTGCTG GCTGAGCCAG ATGAAATAAG  
 318751 TCCCCCACC CATCACTGAG ACATGGTACC ATCAGGTTGT GTTACCAGTT  
 318801 AAGGGCTTGG TGCTGGTCTT TGGGCAGCTC TGGAGGCAGA ATGTCAGGCT  
 318851 TTGGGCTACA TCTGTGCCAG GACAGGCTGC AGGACTAGTC CCAGAGTTGG  
 318901 GCAAGCTGGA AGACAGGTGC CTACCACAGC AGGACACCTG CCCCTCTGCC  
 318951 CTGTGTCTTA GAGGCCTTTT CCTTCAGCAT GGATCCTGGG GAAGGGAGAC  
 319001 ACATGCAGTC ATTCATTGAG GAAGGGGAGA AAGTGGCAGC CAAGGCCCCA  
 319051 CTCTCAGGAG CTCCTGACCC ATCTAGGGAA GTGGGGCTCC CAGGCAAGAA  
 319101 GGAGGTATGT AAATATCAAG TGTTAAACCA CAGGGTTGGG ATGATAGGTG  
 319151 CTGTGGAACC ATCTGGGCTT CCTGGAAGAA GATGGGCTTA GGCTGGATCT  
 319201 TGAAGAATGA AGGTGGGATA TATTGGACA GATAGAGAAG GAAAGGGCTC  
 319251 TACTTCAAGG CAAGAGAAAG GCTCAGAAGA AGGATTAGGA GTGGGGATTC  
 319301 AAGAATATAA TTCCTTCAGT ATTAAGTACC TGCTAAAGGT GGGCAGATCA  
 319351 ATAGCGGGGC AGTTGGGGTT GTGACCTCAT TTTCAGCTCT GCCCTGCTTT  
 319401 GCCCTGAGGC TCCAGACCTC GCAGCCCCCA AGGTTCCAC TGTATCCCA  
 319451 GTTCCCAAGG GCAGCTGGGA TCTGACCTTG CTCCTGAGAA ATGCTGCATG  
 319501 AAAGAGGGGC ATACACTCTG TGGAGCTCCC TGCCCAAGG GCCTCCTCCA  
 319551 GGCCAGGCTG TGCTCTGAG CCCAGGCTGC AGAGACGGGA GGATGGCACA  
 319601 GCACCACCTC TAGGGTATGG AGAGCAGCCT CTGACAGACC CTCACCTCAG  
 319651 TCTTTGTAGA AAGAGAGCAG ACAGTTTTCC TGTAACCGAG GAATAATTCT  
 319701 CAAGGTGGAC ATGCGACCCA GAAAAATGGA GTGATGCTTA GTCCCCAGAT  
 319751 GCCCCCTCCA GCGCTGTCCA GCTGTCTTGA CAGGGGCTGC CACTCGGATA  
 319801 GGTCACTCAA GCGAGGCCAG AGCCCTTTTC ACAGGCACCT TGGGGCCTTG  
 319851 GGCTACCTT CACTTTCCAG GACACAAAGG CTCTCCCTAG GCAGGCTCTG  
 319901 TCCAGCATC CAGGGCCAAG GGGCTCAGGC AGAGGCTCTT TAAAAGCTTG  
 319951 GTGCTTCATC TTGATGAGTT TCTTGCTGGG GGCTCTGAGC ATTGTGACTG  
 320001 TGACAGTTTT TGAGCCCCTC GTGGCTGGGC AGGGTCTGTG TTTGGTCTTG  
 320051 TGGGTACTGA ATATGAAGCT GTTTCCAGAT GAACAGCAAC ATCGCTCCAA  
 320101 ACAGTTCAAT TCAGTGAGCG GGCCAGGAGT GGGGCTGGG CAGACCCAGA  
 320151 CAGGCCTGGG AGGGGCAGGC AGCAGCCTCT CCCTGGCTGT GCTGCTGAGG  
 320201 GTGCCTGGGG CTCCTGTGCC CACCATGGGG GACCCCCGGG ACAGAGGGGC  
 320251 CTCTACTACA GGGCCCCTGC AGCCTGTCTC CAAAACCTCT ATCTAAGGCC  
 320301 TGCAGAGTCC GCAAAGCCCC ACCCTCAGAA AGGTAAAGTC ACTCACTCCC  
 320351 AGGGCTACCT ACTTAGTAAG AGGTGGGGCT GGAATACTCA AAATACATTA  
 320401 ATCATTTTTT AAAATAATAA TTGTTCTTTA CTGAGGCATT ACTTTGTGCC  
 320451 AGGCACTACG TTAAATCATT TATATTATAT GTAGTTCAGT CCTCAAACAG  
 320501 GTACTATTAG TAACCCAGT TTACAGATGA GATGACTGAG GTTGGGCAAT  
 320551 AGCACAGCTG GGATTAATC CAGGCAAGTC CAAGTCCAAA ACAACAGCC  
 320601 TTTCTCTGCT TTCCTGAGGC AGGAGATTGG GGATAAGGCA TGAGGGAGAG  
 320651 ATGCAGAGTG CTGTGATGT GGCAGTCATG GAAGGCAGGC TCCCTGGAGG  
 320701 AGGTGGTGTG TTGCATTTGA ATGGCATCCA GAAGGATGTG TGTGATTGGA  
 320751 GTAAAGGGCA GGAAGAACAG TGGGAGCAAA GAAAGACACT GAGGCTGGAG  
 320801 GACACAGAAT ACATTCAAGA AACGGCACTG TTGTCATCCT AGAGCAGAGT  
 320851 GCGGGCAGCA GGGGGCAGTG GGGACCACAG TGTCAGGTCA GTCAGACTAT  
 320901 AGAGGCCTGG AATGAGAGGC CAAGAACAGC CATCCAAGC TCTGGGCAGG  
 320951 GGAGAAGCAG ATCCAGGGCT GAGCTGGTTG GGATGCCTAT GCCTGCATCT  
 321001 TAGGAAATGA AATGACCCAA CTGCGGCCTC CATCATAGGC CAGCACCCAG  
 321051 GTAGCATCCC GAGCCACTGC TGATTTAAGA GATGTGCATG CAGCTGTCAT  
 321101 TCACAGACTC CCAGCAATAG TGTTACCTC CTCGGTAGAA TAGTCACCTA  
 321151 CAAAGCATTT TTTTTTTTTT TTTTGAGATG GAGTCTCGCT CTGTCACCCA  
 321201 GGCTGGAGTG CAGTGGTGCG ATCTCAGCTC ACTGCAAGCC CCACCTCTG  
 321251 GGTTCATGCC ATTCTCCTGC CTCAGCCTCC CGAGTAGCTG GGACTACAGG

321301 CGCCCGCCAC CACACCTGGC TAATTTTTTG TATTTTGTAGT AGAGACGGAG  
 321351 TTTCACCATG TTAGCCAGGA TGGTCTCGAT CTCCTGACCT TGTGATCCAC  
 321401 CCGCCTCAGC CTCCCAAAGT GCTGGAATTA CAGGCGTGAG CCACCGCGTC  
 321451 CGGCCAACCT ACAAGCTTT AACACACTGA AAGCAGAGGA TTTCTGCCTG  
 321501 AAAAGCACTG GTATTTGGAC TTGTGAACAT AAAGATGGGA ATGCAACCAG  
 321551 GCAATGCAGG GGCTGCCTAG AGTCAAGGGT TTGTTTTTAA GTAAGAGAGA  
 321601 CAGAAATGATA TTTACAATCA GTACTTCTCA AATTAGGTTT TCTTTTATG  
 321651 GGATTGAAAA TTCTCCATT C AAGCCCCATG GAGAGATGTG GTCTGAGGGC  
 321701 AGCATTGAGG CGATCAGTGT GTCTTAAAC TTCCAGACGC TCACAGACAC  
 321751 TTAAGTAA AACAGAGAGA AAAAAATTG TTTCCAAAA GCAGCAAAGA  
 321801 AGGTGTATCT TACTGTAGG ATCCTGTCAG TCCACTGTGG GCCAGCTCAG  
 321851 ATGCCACCTC CTCCAGGAAG CCCTCCCTAA GTCCCTGCC TGCAGTCTA  
 321901 CCTTGCTTCA GATGCATAGT GGAGGGTCCC CAATGTGATG ATGTGGCCTC  
 321951 CAGCTGGGGC AACATCCATG GGCTCCAGAG AGCCACAGGG GTCATGAGTT  
 322001 GATTTTTTAA GCCTTTTGAA CCATAGCCTA TGGGTGAGAA GAAAGGTTTT  
 322051 TGTCAGATT GAAGAGGCGA TTAACCTGTA GCGGGTGGAT GTACATCAA  
 322101 AACGTGCTCC ACAGAAACAA GATCTCTTCA GAAAAAGTTA GGTCTCATTG  
 322151 CAAGTGTATT TACATGCCTG AATGTGGAGA TCTGGGTAGG GCCTCCAAAG  
 322201 CTCTAAGGTC CGTTGTCCCT CTCTGTAGT ACCTAGCAAG TGTTAACCGT  
 322251 GTGCCTGATA CATGCTAAAT ACTTTTCACA TATTCAGTCC TCACTAAAAG  
 322301 TCTATGAGGC AGATTCTGAG TCCCATTTTA AAGAAGAGGA AACTGAGGTC  
 322351 CAGAGAGGTT AAGAAATTTG CCCAAGGTTG CATAGTCAGT AAATGGTGGA  
 322401 GTTGGGATTA GAACCCAGGC TCCTAAGCAC TGCACAACAT CACACCCAGG  
 322451 GATGCTTAGA GGTGAGCCTT GTGTCGTGAC CATGTCACAC ACACACCTAG  
 322501 GTTGCAAGTG CCATGGACAC AGGGCAGGTC AGATTCTGCT GTGCTCAGGC  
 322551 ACCCAGGACA GGGCTTGGA CAGAGCTTAG TTATTGGTGC CCTGGCAGGT  
 322601 GGGGCCACCG ATCCAGCTCC CTTCTAGGA CTTCTGCTC TGGGCAAGTG  
 322651 GTCAACCCTG AGAGTGCTGA CAGCCAGTG GACAGGTCTT GGCAAAGTCT  
 322701 ATGCTGGGC GTGGCCTAGC CTGCAGGCC ATCCTGAGGT TTATGAAAG  
 322751 TGAATCACCA AACCGGGCCA GGTGGTGTG AGCTGGGTGC AGCTGGGGCA  
 322801 GCGAAGGAGC CATTGGACCT CATAGTCTGA GTGATCCTCA GAGACTGACT  
 322851 CGCCAGGGAG TTTTGTGTGA CTGACTGACT CCACAGCTGG GAGCTTTGTG  
 322901 TGACTTCCTC ACAGAGGAAG ATCACGTGAG ATGAGTGAGG GAGGCTCCTT  
 322951 GTGGTGGCAG GACATGCCCT TGGCCTTGGA GGAAACAGGG AAATCATTCC  
 323001 TTTGGAAC TG TTAAGAGGAA AATGTGAGAA TTCAGATCCT ACTCCATGGC  
 323051 AGTTCTGAGG GTAATATTTT AGGGCCAAGG GAATGGGGCA CCTTTCTCTG  
 323101 CCAAGTCAGA GAGAACCTTT GGTACCAGAG GCAGCCTTCA GGGAAAGGCT  
 323151 AGGGTCCCAG CCAGCTGGCA CCTGACTGAA CCTCACTTGA GCTGTATGTG  
 323201 TTCCCTCAT TCTGCCAGGA CACTGGTCAA AGCTGAAATA TTATTACTAT  
 323251 TACAAGGTTT TAGCAGTGCC ACCTCCATCA AGATTTCCAT TTGTCTTCTC  
 323301 GCTTCTCTTC TCATTGTTTA CAAATATTTT TTGACTTCTC TCTCTTCTTT  
 323351 CAAACAGTGC CCTGCCCAT TATAATCAGA AGACAAATAA ACTTTGTGCA  
 323401 AATCTCCCTG TTCCCTCATG AACTAGCCAG GCATAGAAGG GGCAACACCA  
 323451 AGGGTGTGCC TATTGACTCA ATGCCATGTT TTGACCACTC TCAGGGCCGC  
 323501 CCAGTGGGGC TTCCATAGCA TCACCTATCA TCTTGTGCCC ACTTACTCCA  
 323551 GAGCCTTCGC TGGCTCCCTA TTTCCACCT CACCAAGTCT GAGCACCTCT  
 323601 GCCTGCTCGT TAGGTCTCGT GCCCTAGCCA GTCCTTTCAC AGCACCTGA  
 323651 CACCCTACTC AGCCTGTCTC TTCCCGTGGG TCTGTTTACT CCCCTACCT  
 323701 ACCCCAGGAC TTCTCCAAAG CAAAAAGCTA ATATGTTAAG GAAGGCAAGG  
 323751 ACCATGTCAG ATATCTCCA GCATCTGACA CCGAGCATCC TCTCCAATT  
 323801 GAGACAGTTT ATATCATT CAAAGTAGAG AATGCCAAGA AGACTGGCCT  
 323851 GTGGGGGTTT ATCCAAATCT TGGATGCCTG AATCTTCTCC AGGAGGGTTG  
 323901 CCCAAGGACT TAAGAAAAAG AGCGAGTGTC CAAGGCAGAG TCCAAGGAGT  
 323951 GGTTCCAGAG CAGCACATGC CAGGGGCTGT GTCTGCACAG GTTGAGTGGG  
 324001 AAGAGGAAGA GGATAATGCG AAGGATGTAG AGGGAGGAGA CTGCCCCGGC  
 324051 AGGCACTGCT CACATCAGCA GGGCGTCAGC AGCAAACTA CTGCTGCCCT  
 324101 CTGCCCCTC CTCCCCTCC CTCCAGTCCC ACTTCTGCCC TGAGGGGCAT  
 324151 CTGTCTTAGG ATCAAGAAGA AATGTCACAC TCCAACAATT GAAGGATAGT  
 324201 GTTTTTAATG ACTTGACTCA CTCTAATTAG AGGAAGCAAC ACTTTGATTA  
 324251 GCAGCAGTCT GACCTGGGAG CATGGACTTG TGAGAATTGC TCCTTATGAT  
 324301 GTGCTTGAG TTCCAAATTT GCAGATGTC TCTCTGAGGT TGGGGCTGGA  
 324351 TCAGCGTGAG AGAAGGGACA GTGCTGGGCA GCCCCCTCCC ACATCTGTGG  
 324401 AGATAACATC TTGCCTTCTA CATGTGTCTC CTGGTCTTTG CCTGATATGG

324451 TTTGGTTCCA TGTCCCCACC CAAATCTCAT GTTGAATTGT AATTCTCAAT  
324501 GCTGGGGGAG GGACCTGATG GGAGGTGATT GGATCATGGG ATCAAATTC  
324551 CCCCTTGCCA CTCTCATGAT AGTGAGTTTC CACAAGATCT GATGTTTTCA  
324601 AAGTGTGTAG CACTTCCGCC TTTGCTCTTT CTCTCCTGCT CTGCCATATT  
324651 AAGACATGCT TGCTTCCCCT CTGCCTTCTG CCATGATTGT AAGTTTCCTG  
324701 AGGCCTCCCA GCCATGCTTC CTGTACAGCC TGAGGAACTG TGAATCAACT  
324751 AAATCTCTGT TCTTCATCAA TAACCCAGTC TCAGGTAGTT TTTTATAGCA  
324801 GTGTGAGAAC AGACCAATAT ATTGCCCTAC ACCCATGCAG TGCTGTGAGC  
324851 CAACAGCCCA CTGTCCAATT CCTCATAATG GTTCTATGA GCCACTGCCC  
324901 CTGGCAAATG CACCTTATGG CCAAACATCT CCAGGGCCTG CTCTCAATTC  
324951 TACCCCAAGC AGCACTAGAA TTTCCCTACC CCTGGGGATC TGCTGCCCCA  
325001 GGTCTGTATA GGAAGGAATG CCACCATGTG TCTGGCATT TTTGGGATGA  
325051 ACAAGAAGGT GAGAGAGAGA AGTGGAAGC AGACTGTCCC CCTGGATCTG  
325101 GACCATGTAA TAGACTCCTC ACCAGCTGTG TCTCTGTAT TGCTTTCTTT  
325151 GTCACCTGCC AATGGACACA TCTTTCCAAG ACAGGGCCCA GGTCACGTGC  
325201 CACCATTTGG ACAAGGGCCA GCCCCACCAG ATGGAGTCTC AAGGCACGGC  
325251 ATGGCCCCGT TAGAGCCTTG GAGAACACTG CCACACACAC ACACACAGAC  
325301 ACACACACAC ACACACACAC ACGCTAGGCT TAAAGGCCCA GAGGACCCCA  
325351 GGAAGCGCAG CACACCTTTA GGATGCAAAC GGTCAGGAC ACCCAGTTTC  
325401 TCCACCACCA CTCTTGAAAA TCTCTGTAC CAATGAGCAG CTCTCAGAGG  
325451 TGAGCAGCAG GTTTCCCTTG TGCTTGGTGA GAAAAAATG GCATGTTTAC  
325501 TTTGGTGGGG TACATCTCCT CCAGCCCAGG GCCCCAACCT TGTGCTAACA  
325551 GACATTCTGC GCCCTCTGC TCCCAAATCA TTTCTCAGAA CTTAACAAGT  
325601 GTTAATGGCT ATCTCTTTGG AAAGAGACAA GTGTGAGATG AGCATTGCAA  
325651 GACTGTAGTA TTTGTTTAGA GAAAGTTGTC TTCCTGGGAA AGGGGCTTCT  
325701 GCTCTTTGTG GTAACAAGGT CAGTACAGAC CCTTTCAGAG CGGTAGTTCA  
325751 GGGCTCAGA CAACTAGGGC AAGGGTGACA AACCCTGGT TCAATGGGGC  
325801 TGAGCCCAGG TGAGGGTTCA GGGCAGTTCC CATTGACCAG ATGGAGTCAG  
325851 CAGGCTTCAC TCATCTGTGA AGCAACTCAG GTCTCTGTTT AGGGTACACC  
325901 AGAGCAGTCC CAGCCCCAG GGCACGAAGA GGGGATGGCT GTCATTCCCA  
325951 GAACGGAAGA CCTCTGCTCC CACCCACAGG AGCCACTGCT GCACCTCCAG  
326001 CTCACCCCCA AGAAGAATCG TATGGGAGAA ATGATCCTGC TGCTAATGGG  
326051 ATTAATAATG ATTTTGAGTT TTCCAATTAC ATATTTCAAT TATTCCGTGA  
326101 ATGTTAATTG GAACTCAACA ATGCAACTGT GAGCTGGCCA GAAACCAGAA  
326151 CTGGTGGCTT CTCCCCAAA TGGCCACAGA TTTCTACCC TGGAACATGC  
326201 AAGGATCTAC CAGGAAGACT CCTCTGGGGC CCCAGTGTTC CAGGAATTC  
326251 TACCACTGCC TGAGCATGTG GTTTGGTGCT CCTGGCCGTG TTCATGTGTG  
326301 CCCACAGAAG GGCACATACT GTTTCCTCTG CTTGGAAGCC CCTCCTCAGG  
326351 CCCTACCTTC CCATCTTCTG GGCAAACTCC TTTAAGACTC AGTTCAAGTG  
326401 TCCCCTGCTC AGAGAGGCCCT TAAGGACACC ACAGATGCCC ACCAAGCATT  
326451 TCCCATGTCT CTTCTCATCT GCCTCCCCTG GACTCACTCA TCCGCCATTC  
326501 CCAAGAGCTT ACATGGGGCT TGGCACATCA TGAGTGCTCT ATGAATTCA  
326551 GCTTCGGGGA AAACATAGGT GCTCAGATT CTGACCAGTT CCACCCACCT  
326601 GATAGGCCAG GCTCTGGCCT GGTCTCTAGT CTGGGAGCCT AGAACCTTGG  
326651 ATTTAGAGCC CAGGTTTGTG AACAACCTCAT CTAGTGAAAT TTCAGCCACC  
326701 ACACTCCCA GAAGTCCTGA CCCAAACCCC ATGACCTGCT CCTTTGAGAC  
326751 CCAACCCATG CCCTGGAAAA GCCAAATCCT CCAAAATCTA TATCCCCTCT  
326801 TCATGTCTTG GGGGCTGGGA CTGCCCTAGT CCAGAACAGG GGGCCTTGCC  
326851 AGTGACAGCC CTCAACTGGT AGCTCAGGAG AAAAGAAAAC CCCTCCCTGG  
326901 CCACTCCCT TCCGTCTGCT TGTCCATCAC AGCCTTCCAC TTTTATTCTC  
326951 TGGTTCCAGC TATTCAGCCC AAATCATAGA AGAGTCCTGG CCCAGGACTG  
327001 CAGCAGCTTT TAGGGAGCTC AGCTTGGGAA TCCTGCAGAG CTGGGCAGAT  
327051 TTACCTCTCT GAGTCTCAGT TTTCTCATCT GTACAATGGA AGTAATTGTA  
327101 CAGAAACATT GTTCTGAGGG TTCAAGGAGA AAATGTGTGT AAAGGGCTTA  
327151 GCAGAGTGCG AGGCAGGGTG CTCAGGGAAT GTCAGATTTT ATTACTGTTA  
327201 TTATCTGCCT CCTAAGTCCC ACCTATTCTA GAGATATTTT CCTAGGAAAA  
327251 GGGTTTCAGG CAACAGTCAG CAGGGACCTT CTGAGGTCTC TGGACTCAAG  
327301 ACCTTGAAGT GTCCCTCAAG GCCATTAATG CAGATCACAA ATACCAGGCC  
327351 CAGGATTTGA GCTAAAGGAG AGAACCAGCT GGCTCAGGGC TCCAAGGAGG  
327401 TTGGGCTGGT GGAAGGGGCA GGACAAAAGC AACTCCAGGG GGTGTCCTAG  
327451 ACACAGGGAC CGGTGTGCAG GCTCACTGCT CACCCACCAA CTGTTTACCC  
327501 AGCAGTTTCC ATGTGTGGGG CACTGGGCAG GCTGCTGGCA TTTAATGGTA  
327551 AGCAAAGCCA GATGTGGTTC CTGCCCTTGG AGAAGTTACA GTTCTAGGGA

FIGURE 3, page 104 of 188



327601 GAAAGATAGG AAAACAGCGG CAGTCTACTC TAGATAGGGT AGTTATGGGT  
327651 AGGGCACCTG TCTGAGGGAT AATGTAAAGG AAGAGACAGG GAGGTGAGAG  
327701 GAACTAGCCA GATGTCCAGG AGACCTGGAG ACAGGGAGGC GCTTGCTGTA  
327751 ATCAAGGGCT GGAGGCAGGC CAGCGTGGCT GGAATGTGGA GGGCCAGGGA  
327801 AGCTGTAGGG GAGGCCATCA CAGAAGGAGG GTGGTCTTTA CTCTGTGTTT  
327851 AGTGGCTACC CTGTGGCTCT GAGTGGGCTT TGGTTTTGGA GGATGTGTGT  
327901 TCCCAGGCTC TTTGCTAAGC CCTGGCAAAA CACCAGGAGC AAGACCAGGC  
327951 AGCTGAGGGG AGCCTCCCAG TTGTGGTCAG TATCTTGAG ACCTGCTTTG  
328001 GGGCTGGGGA CTTGGTGCTG CCACATTTTG AGAGCAGTTT TCAGAGCAGC  
328051 TTGGGGATGA CTTTTATGCC TCATCTGCAC ACCCCTGGCC CAGTCCATGT  
328101 CCCAAATGGC ATCAGTCTTG ACTGGGAATA ACTCAACTCA CAAATATTTA  
328151 TGCCTGGGCT CTGAGGTGGC GAGCTCTGTG CTAAGTGCAG AGGGTCTGAG  
328201 TGGGCCAACT GAGCCTGCAA CCTGCCATTT CAAGGTCTCT CCCCTCACCC  
328251 CCTCCCATA CCCACCTGCC ACTTGCCACC TAAATCCTGT CCATGTAATG  
328301 AGGCTGGGGT TGGCAATGAA ATGATTGGCC AGGGGTGAGA GCAGGTGGCC  
328351 ACATTGAGGC CTAGAGGGTA CTAGAGGTTG ATTTGCTCCC TGAGTGCAAT  
328401 AAGGACCTTC CTAGGGTTTC CTAGGGCTGA TATGAGAGAT GATCACATGG  
328451 TGGCTTTAAA CCACGTAAAC GTGTGCTCTC ACCACTCAGG AGACCAGAAG  
328501 CCAGAAATCA AGGTGCTGGC AGGATCACAC TCCCTTCAA GTCTCCAGGC  
328551 CCTTGCTCT TCCACTTCTG GTGGCTCCTG GTATTCTTG GCTTGACGCA  
328601 ATGTAAGTCC AGTGTCTGCC TCCATCTTCA CAGGGCCTCC TTCTTTGTCC  
328651 CCCATGTCTT CTCTCGTCT CATAAGGACA CCAGTAAGCG GATTCAAGCC  
328701 CACAGTAAAT CCAGGATGAT TTCATCTCAA GATCCTTAAG TAATTATATG  
328751 TGCAAAGATC CTATTTTCCA ATCAGGTCAC ATTCTGAGGT TCTAATAGAC  
328801 ATGAATTTGG TGAGGGGTTG GGGACACTAC TCAACCCACC ATAGGCCCCA  
328851 AGGAGGATGC CCCTGCCACA TGACCCTGCC TCATGCCCTG ACGTGGGTCT  
328901 CATAGGCCTA CCAGCCCTGT GGCCCTCCA CCCACCTGA CCACTCCGAT  
328951 CCGTGGGCTT CCACCCTCCC CGTGCTCACA TTCCCTTGG ACCATCCTAG  
329001 GAGATGTGTG CACGTGGCCA ACCCAGACTC AGCCTGCATC TCCTTGCCAG  
329051 GCTCCTGGGC CCCACCTGTT GGCAACAGTC TAAGGCAGCA TTCCTAAACA  
329101 TTTTGGGAC CAGGACTGG TTTCTGGAA GACCGTTTTT CCACAGACTG  
329151 GGAGTGGGGG AGCAGAACAG AGATGGTTTC GGACAAAAC GTTCAGCCTC  
329201 AGATCATCAG GCATTAGATT CTCATAAGGA GCACATTACC TAAATCCCCC  
329251 ACATGCACAG TTCGCTATAG GGTTTGTGCT CCTTTGAGAA TCTAACGCTG  
329301 CTGCTGATCT GACAGGAGGC AGAACTCAGT GCGCGCCGT CACCTCCTGC  
329351 TGTGCAGCCC GGCTCCTAAC AGGCCATGGA CCATCCACGG CCTAGAGATT  
329401 GGGAAACCCCT GGTCTAGGGC ACTAGGAGTA CAGAGAACAC ACAGTCAGTT  
329451 CTAAGAAGCT TCTCTATAGA AACTGACATT CTTTTGCACG AACCCCCAGC  
329501 TTCACAGCAG CATTTGAGTT GCAACCACAC AGTATAAGCC TGCTGGCCAG  
329551 GGCTGGCAAG TTGCTGGGGC CTCCAGTGC AGGGCGGGCA AAACACATGT  
329601 GCAGCTACAT CTTAGCTAC TCAGGCCAG GAAGGCTGTT ACTACCCTGT  
329651 ATACCTGAGG CTACCTTGCC ATCTGGGCTT TAGTTGATTC GTCTGTGGGA  
329701 GGAGCAGGGG ATCAGATTGT CTTGAAGGGC TCATGCCTGC CTAATATCTT  
329751 GGTCTGGAGC AAGAAATGCC CCTGCATAGC TGTGAGGAA CGGCTGGCGT  
329801 TTTCTAGATG GCAGTGGCCT GCAGACCTAT TGGAACCCCT TCTAGGGAGG  
329851 AACATGTCCC TCTGAGCTCA GCTCCTAGGG TCCAGTGCTC CACTGAGGTC  
329901 TTCCTTGAC CTCTCATGTC CGCCAAGAGG TTTCTGATG CCACCTCACC  
329951 TGGTATGGCC TTCTGGGACA GGCAGGAGAC CAGGTCTGAG CTCCCTTAGA  
330001 CTGTGTTGCA GGGAAAAAGT CATCACTAAG ACACACCCAA CTCCTGAGAG  
330051 AACAGGAAGC ATACGCTGGT ATCAGCCCTG ACAGAACGTG GGAAAGAAAG  
330101 TTCCAGCACA GACAGAGCCC TGCTGGGAGC TGGGACTCCT GAAAATGGAA  
330151 GGGCTCTCCA TGTGGCTGGA GGACAAGTAG GATTTGGGAA CACAAGCCAA  
330201 GACTGCAGCC GAGGTGTGGC AGAGGGCCTG GGGAGCTGAG AGAGTTACAC  
330251 AGGGCTTAC AAGACCCCTT TGCTCCAAAC AGACATGCCA CATGGAACCC  
330301 CAGAGCTCTA GGGAGACAGG CCTCTGGACA GGATGCCTAG CCCTCCTATA  
330351 GACTGGCCGT TCTTGACGCC AGTCATGGGA CCTCTCTGCT TCTGAATGTC  
330401 ACTGTGTACG CCCAGCAGCC CTTTGTACAG GCCATGAGAC CAGTCACCTC  
330451 TGATGTGCTG GGGGTGATCC TGGGGGCACC CATGCAAATC TTTTAAGGTT  
330501 CCTGGGGTTA GTTTTCCAC CTGTGAATTA GGCTCACCCCT CCGTCTATTG  
330551 TGGTGAGGGC CGCATGTTCC AGGCCACGGG ACTGAGCTCA GAAGAGCACA  
330601 CGGCTCTGGT CACAAGAATG GGCAGAGGGT GATGAAATCC CTTGTGCGGT  
330651 GCGCTCTTTG CTATGAGGCC CCCACCTACT CCGGACTGGC TGTTCTTTAT  
330701 CTTTGGCTTC ACATCAGCAC CAAGTGTCCT TGGCATGAAC CCCCCAAAAC

330751 AGTTCAGAAG AGGGCTTCCT CCTACATCAT GCCGGTGGGG GAAGAAAGCC  
330801 CAGGGCCCCA GGATCCCCCA GAGTCAGCCC CACTCGTGAG GCTGCTTTAT  
330851 CCAGAGCATC AGGGGCCACC CCAAGGGGCA AGTCAGGTCT AGGAGGGCCC  
330901 CAGCCTTCCT GCAGGCTCCT CCCAGGACTT GCCCAGGGGC AGAGAGAAGG  
330951 AAGCTGATGG GGAATAGCAA TACATTCTTT CCTCTGTAAA GATTCTATTT  
331001 GCTGTTTAGC CCTATGTTTT CTATGATAAT ATTTCAGTTA TTTTITAGAT  
331051 AGTAAGTGGA GTGCAGCATA CATAGAAAAG TGCACAGCTC AATGAAGCAG  
331101 ACAAGAGCAT GCTGTGCAAC CACTGTCCCC ATAAGAAATA CAGTGCCGCC  
331151 AGCACCTCAG ACGCCTCCT TCCTGCCTGC ACCCAATCCC CATACCCGTC  
331201 CTCCTACCTG ACACAATTAT CATCCCACTT TTCTTTTCTT TTTTTTTTTT  
331251 GAGACCGAGT CTGTCTCTGT TGCCAGTCT GGAGTGCAAT GGCACAATCT  
331301 CGGCTCAGTG ACGCCTCTGC CTCTCAGGTT CAAGCAATTC TGCCTAAGCC  
331351 TCCCAAGTAG CTGGGATTAC AGGGGCACAC CGCCACACCC AGCTAATTTA  
331401 TTTTTCATT TTTAGTAGAG ACAGGGTTTC ACCATGTTGG CCAGGCTGAT  
331451 TTCAAACCTC CGACCTCAGG TGATCCACCC GCCTTGGCCT CCCAAAGTGC  
331501 TGGAAATTACA GGAGTGAGCC ACCGCGCCCC GCCTATTACC CTGTCTTTCT  
331551 AATATCACAG AGTAATTTTG CCTATGTTTG AACTTTGTAT CAACGGACTC  
331601 ATACAGAATG ATCTCTGTGT GCCTGGCTGC TGCTTCAAA CTATGTCTGT  
331651 GAGATTGTC TATTGTCACT TCATTTATAG CAGGAGTTTG TTCTTTTCA  
331701 TTGATGATAA TATTCTGTTG TAAGAATATG CCACCTGGGT TGATGTACCA  
331751 GCTTGTTCCT AGTTTGGGAA AATTATAAAT AATGGTCCTA TGAATGTTCT  
331801 TGTGCAAGCC TTTGGTATGC ATCTCTGTCA GAAATCTATC TCTTCGCATC  
331851 AAATTGCTGG TGGAGAATAT GCACAGAGTA ACAAGATATT GATGCCTGGT  
331901 TTTAAACATG CTCCTGTTAT AAGAGTAGAC ACTTAACCAT GGTGGGGAGT  
331951 GGGGAGGGAT GGCCTTTGGC CCCAAGGTAC CCATTCAGGG CCAGCTTGGG  
332001 ACACAGTCTT GAGGGGTCAT TATTATTTCC CCCACCATGG CCTTGAGACC  
332051 CTGGGTGTTT CTACAGGGCC CTCCCTGCCT TTGGGTCAGG GACACTTTTC  
332101 AAGAATTTGC CATAAGGCTA AGGGCTCCCT GGGCCAAGAC AAAGGAATGT  
332151 AGGGCAGCAG CCAGGAGGGA GGCCAGGGCG GGACAGACCT TCCGGGGCCC  
332201 TGCCATCCCC AGCCTGTAGA CAGCCACCTG CTCAGAGGAG CCACCTACGC  
332251 GTGCCCTCCC TCTCCACTGG GGTCCAGCAT CACAGGCCCC AAGCAAGCCA  
332301 GGAGCAGGCC GCTGCTAGCC AGCTGAAGAC AGGGTTGTGA GCACCCTCTA  
332351 TGGCTTCCAC CCTGGGGGAC AAGAGATGTA TTTCCCTCCT TAAGGAAGGT  
332401 GCAGACCCCA CTTAGAGGGG AAACATTGTG ATTGCTCTCT GTTGAATTGA  
332451 GTTATATTTA GTATAATGTT ACTTAAATAT GTACAAACAT AAAACCAGGT  
332501 ACACGTTCCCT TATGCAGGGA GCTCTCTCAC AGCCATAAAG CTAACAAACA  
332551 TTTATAAATG AAATAAAAGC AAAGTGTTAT TGTTTTCTCTG AAATAAATC  
332601 CAACATTAAT TTAATGGGAC AAAGTGTGTT TGTTTTCTCTG AAATAAATC  
332651 AGCGCTCACG GCTGACTCTG GGGCAGGCTG CTGTTGTTCT CCAGGGTTTT  
332701 CTGCTACCTT GCCGTGTGCT GCATGATGAC TCAGCTCTCC CACCGCTTCT  
332751 TTCTCCATTG AGACCACTTC GAAACCTTCA TTCCCACAGT CTCCTTAGCT  
332801 CTTTAAGCCT TGCTTTGCTC ATCTGTAAAA TGGAGAGGGT ATTCGTATGT  
332851 ATTTTGTTAC GAGAATTAAG CCAGTTGATG CAATGCAGCC TTCTGGCTTG  
332901 AGACATGTGT AGTCACACAG GGTCCACAC TCAGAAGGGG CCCATGCTTG  
332951 CTTTAATGCT CTGCTGTGCA CATCTTGAAA TTCCTTTTTT TTTTTTTTTT  
333001 TAAGACAGAG TTTTCTCTCT GTTGCCCAGG CTAGAGTGCA GTGGCACGAT  
333051 CTCGGCACCC TGGAACCACC ACCTTCCGGG TTCAAGCGAT TCTTCTGCCT  
333101 CAGCCTCCCA AGTAGATGGG ACTACAGGCA CCCGCCACCA CGCCTGGCTA  
333151 ATTTCTGTAT TTTTAATACA GACAGGGTTT CACCATGTTA GTCAGGCTGG  
333201 TCTCGAATC CTGACCTCAG ATGATCTGCC TGTCTCGGCC TCCCAAAGTG  
333251 CTGGGATTAT AGGCATGAGC CACTGTGCCT GGCCACATT TGAACCTCAT  
333301 AACAGAGTTT CCCTCCGTCA CCGAGGCTGG AGTACAGTGG TGCAATCTCA  
333351 GCTCATTGCA ACCTCCACTT CATGGGTTCA AGTGATTCTC CTGCCTCAGC  
333401 CTCCCGAATA GCTGTGATTA CAAGCGTGCA CCACCAAGCC CAGCTAATT  
333451 TTTTGTATTT TTAGTAGAGA CAGGGTTTCA CCATGTTGGC CAGGCTGGTC  
333501 TCAAACCTCT AACCTCAAGT GATCCACCCG CCTCGGCTC CCAAAGTGCT  
333551 GGGATTACAG ACATGAGCCA CTGTGCCCAG CCTAAATTCT TATAATTTTT  
333601 TAAACAAAGG GAAGTGCATT TTTATATTAC ACAAGGCCCT GTAAATTATG  
333651 TAGCAGGTCC TATGCATAGG ACAAAGTCAG GTATACAGTT GGCACCCAAT  
333701 AACTGTTAGC AGCTATTACT GGTACCTTGT CCTGGTTACT AAGTACAGAT  
333751 TCTTTGTGAT GTTTTCTCTT GATGACAGTT TTATCTTCCC ATTATTTAAT  
333801 AGGGGTGGAG AGGCCACCTC ATGTGTGTAA TTGTATTGTA CTAATCTTGT  
333851 GAGTTAGATG TGTGCTTTGG AGCGAGGACT GCTGTGTTGA CGGAAGGATT

333901 AGCTTTCTGG GTCACGTGGG CGGTCTGAGC ACACCACCCC ACCAAAGCCC  
333951 TCTCACTCGG GACCAGCCCC TAGGCTTCAG ACCTGTGTCT CTAGGCTGA  
334001 CATTCCAATG GGGTCAGGCA GAATACTGCT GTCTTCTTGA AACCTCTTAA  
334051 ATAGGTGGCC AGAGTTTAAG TAAGTTAACA GGTATGAAG TTGAAGACAC  
334101 TTGAATGGAT GAGAAGCTCA GACAGAGTTG CTAATTTAAT TTCCCTTTTT  
334151 TATTGCTGTT CTCCTAAAAA AAAAAAAAAA AAAAAAAAAA AAAAGCTCAG  
334201 ATTGCCCTTT TTCTGAGAAT GAGATATTAA TAAGCACAGC ATTTTGCAAA  
334251 AGTAGAGAAG GGCATTAAAG TTTTGCAAGG TCTCTCTATT TGTCCCTCAC  
334301 TTCTCAAGGC TCTTCTGCTG GCCCAAATAG GACACAGGCT GAGGGGATTA  
334351 ACTGCTTAAA GTTCAGGAAA TGGGAACCAC CTTGGCTGCT GTCACCAGAC  
334401 TCAAGTATTA AATAACATCC CTGCCCTGCC AGAGGACATC TCTGCAAGCA  
334451 ACTCCATCAG CCCACGCCAC CGCCCTGGCC ATGTTGAGAG TTGCCAAAG  
334501 AAAAAAGAAC ACTTGGGCCT CAAAGTGCAG GCATTAATAT CCTAAGTGTC  
334551 TCATCATGGA AGACTTTGTT CCCCAAGGAG AGTAAATCTT TCCTTGTGGG  
334601 ATGCAGCAGG CTAAGGACCA AGCTGACTCT CTGAGCTCAG TAATCAGGCT  
334651 AGTCTCCTGC TGGAGGCACA GAAGGGAAC CCGCTGTGTG TCAGCACCTC  
334701 CTGCATGCCC TGACTCATGC TTGGGGGAAG GACGGTGGAG TGAGAGGCAG  
334751 ATATGGACCC TCCCTGGGCA GAGCTCCCTG TTATCCCTGG AGTGGGTTAC  
334801 TCCTTCCGCT GCCTGCAAAAC GTAGGTTTCC CTTAGCTAC GCAAAGGCCT  
334851 GTGAACACAG ATACGTGGTC ACAAGCATCT TTGCAGCTGT TTCTTTCCAC  
334901 CAGCTGGGG CCTGCTGGGT TCCTGAAACC TCAGGGTAAG TCAAGCCTCA  
334951 GAGGTCATCA GTAGCCAGTA TCCACTGTTC TGCACCCCTT GGGAGAAGCT  
335001 CGAAGAACAG GGTGCGCAAC TTCTTCAGTA AGATCCCCCA GGTAACCCCTG  
335051 ACCCAAGTA GCTCCCTCCT CCATTAAGAG GAGCCACAGG CCCAGGTAAG  
335101 CCACAGCCAC AGGCCACACA GGGCCCCAGG CTGGAGGACT CTAGAGCTAA  
335151 GTCTCCAACA TGGCTATGTT ACAAGTCCTA GGTATGTGTG GCTGCTGAGC  
335201 ACCTGAAATT AGGCTAGTCC AAATTGAGAT GTAAGTATAA AATACACATT  
335251 AGATTTTAAA GCCTTCTGTG GAAAAAGAAG GTAAATATCT CATTAACTAA  
335301 TTTTACATT GATTTTATGT TAAAAGAGTA GTTTAGATAT TATTAAATTA  
335351 CTATCAGCTG TTTCTTCTTT TTACTTGGCT ACAAGAAATG TAAATCAGAT  
335401 ATGTGGCTTG CATTGCCATA CCATTGGACA GCACTTCCCT GGAGAGAACA  
335451 GAGGAAATAT CACAAGAGTC AACCAGGAAG GTCAGAACTG TGACAAGGGA  
335501 CTAACCTCTC CCTATGCCCC GCGCTGGCCC CCAGCACATG CAACTCTGGC  
335551 CCTTGATGGC CCAATCCGTC CTGCTCCTGC AGGGGATGGC AAACCCTGGC  
335601 AAGAAGCTCC CAGAAGGGGA ACTGAAGGGC TGTTCTATGA CAAATATTAT  
335651 CAGCATCAGA AAGTCAAAC TGGTTCAGG GGCCACCTGA GAATTACAAG  
335701 TCCTAACAGA TGGCCCAAGT TTTCACTTC TCTTCTGAGT TTTAGTACAA  
335751 AATCCAGAGA AACAGTTATA GATCTGTTGC CACATCAATG CCTACAAACA  
335801 TTCACCACTC GCGATGCTGC CTTTAGTGCT AATGCAGCGC ACTCATTTAC  
335851 AGACTAATAA AATCGGAAGA GTTATTATTC CTTTAAAATG CAGACATATC  
335901 TGGGGTATCC ACTTAATGAC GCATATGGAA TAAATTACTT TTGGATGACA  
335951 CTTTTTAATT GAACTGAAC TAAAGCTTAG TAATATGTTG CAATAAGAAG  
336001 AATATTAGGA TGATTAAGG ATCTAAAAAC TCTTGCAGAA TTAAATGATT  
336051 AAACATAATG CTGAGTAAAT GAACAAGCCC GTGTATATTA ATCAGTTGTG  
336101 GGCCTCCAGA AGCCGTCGTG TAACTAAATG CACGTCACGG CGCTGCACGC  
336151 GCGTGCCTCC TCTCTCCCTC CACGCCGGCT TTCCATCATG CCCTCCTTAC  
336201 CACCACGCTG GGCAAAC TGTTCACACA GACAAACAAT GCGTTAAGAA  
336251 TGCAGTGAGT GTAAGTGTTA CAAGAGCTAT TGCTTCTTGG CAAACACTCA  
336301 TTCCTTTGGT TGTGCGCTTC AAGAAATGGC CGTGTCATTA ATTTTCAGTC  
336351 CCTGTTTTTA ACTGAAATGA AACTTTAAGG TGCAAAAATT AATAGAATTC  
336401 TGGCTTCCCT TCTGATTGTA GGAATTGACA TTCCTGGTAC ATTCCCTTGG  
336451 TTGGGATGTC TCCTGTTTCC CATTAAAGCCA CTCACCTCAC TGTGTTTTAA  
336501 TTTCCCTGGA ACTGTTGCGT ACCATGAGTC GCTCTTAGGA AGCTGGGGGT  
336551 GAGAAAGTCA TGTTGGGAGA AAGTGTGAT TCCAAAGCCC CCCGGTCAAA  
336601 GCTGGCTGCT CTTTCAAGGTG GAGGAGGAAA AGCAGCTCTG TTGAGGTCCC  
336651 AGGAGGGCAT CCCCTGCATC CCTCCCTCCC TCTGCCACTG GCCATGCCAC  
336701 CCAGCACCGT GCAGGTGCC TTTGTATGAC CTAGAAAAC GATTAACCTC  
336751 CTTATGCACT TCAATCCCGG CCGTCTCAGA GATAACCCAG GTAATTCTT  
336801 TTCTGATTGT ATAAATCTTT CATAACCAAG TCACAGTCAT AATTAGTTAC  
336851 ATAAAAATTC AGGTTACGAC TTAGGCTGTT ATTAGGAACA TGAAAAACAG  
336901 TGAAAAGTTT TGTCTCACTC ACTCTCTAAT AAAAATCTC AAGGTCTCTG  
336951 TTAAGTGAAG CAGAAGGGAC TTGGTATCTC ATTAAGGCTA AAATTCAATT  
337001 CAGAACAGAA TCTCACTAGC TGGGCTTGAT GCTGGGGCGG TGGGGGGCAG

337051 GAAAGGCTAG CCACTCCTGG CAAGAAGTTT AAAGCAGGTC TGTGCTCTCC  
337101 ACACCTGTGA TGTGTCGTGG CCTTCCCTCG GCTGGGCTGA GAATCTGTGC  
337151 TTCCAAAACC AATGCCACAA GAAGCCCAGC AGAGGCATCT TCTCAAATGA  
337201 AAATATATTC CCCAAACCAA AGTGTGATC AAACCCATCT TGCAGCACAT  
337251 CACACTGGAA AATAACACAG TGGAAATCCA TTAAGCCGAT GGCTCCTAAA  
337301 GAACAAGTCA GCTTTCTGAA AAGTCCCAGA TAAAGCACTA CAATTGTCTC  
337351 AATGGCTTAA TGTAATCACC TACCAGGGGC ACTAGATTCA TCTTCCCCAA  
337401 TTGGGCAAAT TAAGAGCCAT CGAAAGGAAT CACATTCCCA CAGTTACCCA  
337451 GGAGACTGAG AGGGCCCTTC AAGACGGGCA AGCAGAGCCT CTCCTGCTG  
337501 CAGCCACTTC CCTCCATCTG GCCCAACTCA GGCTTGAAG CAGAGCTCAG  
337551 GAAGTAGCTC TAACTGAAC CCAACTTACA ATGGAACCTC AGAGAGCCAA  
337601 GTGTTTGAGT TCCAAGGATG GAGGTAAAGT TTTTCAAAGG CTCCAGTCC  
337651 TGAAGACTGA GGCCCATGTG GAGTTATTAA ACTCGTCCTT TCCAGATGGC  
337701 ACAGCGGATT ATGACTATGC AACCTTAGAC CCAGCAATTG GAGTAGTTCT  
337751 GGGCTTTGGA TAATGTGGGG GTTATCATAC AAGCTATGGG GCAGGAGAGC  
337801 ATAGAGTAGG GGTGACCTGC CCTTTACAAA ATCCCAGTCC CCGCATGTCT  
337851 ATCTGAAATG CAAGAGTCAG ACCCTCACCT CAGCAGATCT CATTCCTCAC  
337901 TTTCTTGCAG GCGAGAAATG CTGAAAACAT TCATTTGTCA AAACCTTGAA  
337951 AGCCACAGGA CTGAGCCAAC AAGGAGAGAA GCAATCAGGA CTTTGTCTATC  
338001 AGAGGAGGCG GACTGCCCCC ACGTCCTATC AAATTTAGTC CGGAATGTAT  
338051 TTTGCCATTA TTGTAACAT GGCCTTCAGC TGCCACGCCG TTTCAGGAAC  
338101 GGAGCGCTAA TACATTCTGT GGCACAGTCT CTTTATGGGG AGGAAAGGAT  
338151 CCCAGTGCCC CTTGACAGAG AGAGAATAAT AGCATAATGC AACAGAACAT  
338201 TTTTGAATG CTAAATACAG CTCTCCGCAA CTTAATTTTA TTTTCTTCTT  
338251 ATTGGCTTTT TTATATGACA TTTCACAGTC CTGTAGCCTC AATAGCTAGA  
338301 TCTGCATCGT AAAAATGACA ACACGGTGAT TTAAGGAGGA GAGTCCATCA  
338351 GAGCGAAATG GGTGGTGTGC TTTTAAAGTA TCAGTTTAGC ACCTCTTACC  
338401 TGGGATCAAT GTTCATTCTC AATACATCAT TAAAGCATCC TGTTAAATCA  
338451 CTTGGAGAGT GGTGTGTGCTC TTCTTATGCA GCCCCAGGTT TGATTATGGA  
338501 GATAATGAAG TGGAACCCTG CAGGAAGGGC CATGTTAGGC ACACGTACTT  
338551 TATTGAGTTA GGGGCTACCA GGAAGGTTG ATCTGAATTA AAGAACTTG  
338601 AGAGGAAAGG AGAGAGAGAG AAGCAGAGCA GGTGCGTGGG CATGGAGGCT  
338651 TCCATCGGAA CTGGATAGGC AGCAACAGAT GCCGTCAAAT TTGAGACCTC  
338701 CTCTCTAAGC TTTACAAGCA CAGTGTTTAC CAAACCCATA TTCATAAGGG  
338751 TCCGAGCTGC AGTGAAGTCT GCAGTCAGCA TGTAAGATGA GAGAGACACA  
338801 CTGATGGGAC TGGTAGAACT TTCCAGACCC CAACCAAAGT GAGCTCAAAG  
338851 GCAAACAGGA TTAACAGGTC CAGCACCCCT TACATGGAGC AGACAAAGGA  
338901 CCAGACAAGG GACCATCTCT AGTGAGGGCT TGGGCCAGAG CATTGGGCTG  
338951 ATTGAAAAAC TCCAGAACC AAGTGAGCAT GAGTTCCTAA GAACATATCC  
339001 TTCAAGTCCA GCTGCCTGTA TGTGGCCATC GTTAGACCCT GAGACACGGA  
339051 TGTTCTCTCG TTTTCTTTCC TTTCTTCTGG AATATATTTT GTTCAAAGTA  
339101 ATACATGCTA ATTGTACACT ACTGCACATA AGAAGTTGAA AGATAACCCC  
339151 TCCCAAATCC CACTGCTCTC TTATCCCCCG TCTCAGCCTC CATGGATAAA  
339201 TTCCACTGGC AATTGTCTTG GACCCACACA GGCTTTCTCT CCTGCATGTA  
339251 CAAACACCAC ACAGGTATTT TTGTGACCTG GGATCAGACT CCACACATTG  
339301 TTTTGCAACT TGCTTTTCTC ATTTAAAACC ATTTTCAAGTC AGTACAAATA  
339351 GATTTGCCTG GCTCTTTCTT TTTTTTTTTT TTTTTTTTTT AGATGGAGTC  
339401 TCGCTCCATC GCCCAGGCTG GAGTGGTGCA GTGGCACGAT CTCAGCTCAC  
339451 TGCAAGCTCC GCCTCCCGGG TTCACGCCAT TCTCCTACCT CAGCCTCCCG  
339501 AGTAGCTGGG ACTACAGGCG CCCGCCACCA TGCCCGGCTA ATTTTTTTGT  
339551 ATTTTTAGTA GAGATGGGGT TTCACCGTGT TAGCCAGGAT GGTCTCGATC  
339601 TCCTTGACCTG GTGATCTACC CACCTCGGCC TCCCAAAATA CTGGGATTAC  
339651 AGGCACGAGC CACCGCGCCC AGCCTGCCTG GCTCTTTCAA ATTCTATTG  
339701 AAACCAAAAC ATAATAACCA ATCCCCTGAT GATGGATATT CAGGTTGTTC  
339751 TTAGTTTTTC ACTAGATAAT ACTGCAATTG GCGTCGTTGG TCACAGATAT  
339801 CTTTGCACAT CTGTGCAAGT ATACCATCGG ATACCTTCAC TAGAGGCTTC  
339851 CTGACAATC TTCCAAAAGT GACTGGCTCT TGTCTCCATG TTTTATGGTT  
339901 TCCAAAGTTA GGAAAAAAA TGAAACAGCT CACTCCCTCC TCCCTGTCTC  
339951 AGGATGAGCA GGAAGGCAGG TGAGGTTTGC ACTTGGACCA TGCTCTGCA  
340001 GAAGCCGGGC TACCAAGACA AATGAGCCGG GCCTCCACCA CCTCCCATTT  
340051 GACCTGCAAA GTCCTCAGAA CTCCCCAGGA CTCCTCAGTC ACCCAGGAAC  
340101 TCAAATGTGC ATTAGCCAG CTTTCAAAAC AAACCCCATG TAGGGGGGTA  
340151 GTGACTTGTC TCACTCAAAG TAGGGGACAG CACACAGGCC AGGGAGGAAT

340201 TGGAGCCCTG GGAGTCAGCA TAGAATTCTC CATCATGTGG TGTGGGAAGG  
 340251 CACAGACCAA AGTTGACCGG ACCCAAAGTG TTCTGTGCTG TAAACTGATG  
 340301 ACCTGGGAGC TTGGGCGACA ATAGATGAAG CTCCCAGGAA GGGGAATCTA  
 340351 GCCTCCGCTC TTGGTGAAGA CAGTGCTCAT GCTAAAGCCT GTTGAGTGGG  
 340401 TTTATCAGTT CTGTTCTGAT TACCTGATGT CTCTGGCTCC TTGATTTTC (SEQ ID NO:3)

#### FEATURES:

##### Genewise results:

Start: 10518  
 Exon: 10518-10643  
 Exon: 41341-41374  
 Exon: 207620-207868  
 Exon: 291903-292096  
 Exon: 295781-295909  
 Stop:

##### Sim4 results:

Exon: 2001-2175, (Transcript Position: 1-175)  
 Exon: 10508-10643, (Transcript Position: 176-311)  
 Exon: 41341-41374, (Transcript Position: 312-345)  
 Exon: 207620-207868, (Transcript Position: 346-594)  
 Exon: 291903-292096, (Transcript Position: 595-788)  
 Exon: 295781-295904, (Transcript Position: 789-912)  
 Exon: 337911-338449, (Transcript Position: 913-1451)

#### CHROMOSOME MAP POSITION:

Chromosome 5

#### ALLELIC VARIANTS (SNPs):

##### DNA

Position	Major	Minor	Domain
1107	C	T	Intron
5479	C	G	Intron
5480	A	G	Intron
6100	C	T	Intron
6122	G	A	Intron
6883	A	G	Intron
7641	C	G	Intron
8493	C	T	Intron
9626	T	A	Intron
9627	T	-	Intron
9796	C	A	Intron
9868	G	A	Intron
10209	T	C	Intron
10311	T	G	Intron
10831	C	T	Intron
12230	C	T	Intron
13378	C	T	Intron
13423	G	-T	Intron
13425	G	- C	Intron
14070	C	-	Intron
14116	A	G	Intron
14508	C	T	Intron
14645	A	C	Intron
14932	G	A	Intron
16272	C	G	Intron
16945	C	T	Intron
17065	A	G	Intron
17442	A	G	Intron
17475	C	G	Intron

17844	A	C	Intron
17929	A	G	Intron
18283	C	-	Intron
18540	C	G	Intron
18592	C	T	Intron
18616	A	G	Intron
20491	C	T	Intron
22023	A	G	Intron
22248	A	G	Intron
23118	G	C	Intron
23789	C	A	Intron
23800	T	A	Intron
23930	T	A	Intron
24159	T	G	Intron
26339	G	A	Intron
26508	T	G	Intron
26570	T	A	Intron
26582	A	G	Intron
26693	G	A	Intron
26884	C	T	Intron
27320	C	T	Intron
27339	A	T	Intron
27542	G	A	Intron
28586	A	C	Intron
28591	C	T	Intron
28599	G	A	Intron
30857	A	G	Intron
31503	A	T	Intron
33107	T	-	Intron
33671	A	G	Intron
35045	C	T	Intron
35944	G	T	Intron
37157	G	A	Intron
37603	A	T	Intron
39242	C	G	Intron
39404	A	C	Intron
40395	C	G	Intron
42294	G	T	Intron
43354	A	G	Intron
43522	A	G	Intron
44875	C	A	Intron
45677	A	G	Intron
46024	A	G	Intron
49591	C	T	Intron
49822	A	G	Intron
50057	G	A	Intron
50523	G	A	Intron
51537	C	T	Intron
52702	C	-	Intron
53996	T	C	Intron
56613	A	C	Intron
58383	G	A	Intron
58512	A	G	Intron
59951	G	A	Intron
63246	T	C	Intron
63904	A	G	Intron
65698	T	A	Intron
66118	A	G	Intron
66158	A	G	Intron
66604	G	A	Intron
67766	C	T	Intron
67863	A	G	Intron
69511	C	T	Intron

69538	A	G	Intron
69782	C	T	Intron
70895	T	A C	Intron
71575	C	T	Intron
72112	C	T	Intron
72665	A	G	Intron
72798	A	T	Intron
73738	A	G	Intron
81059	G	-	Intron
81061	T	- G	Intron
81328	A	C	Intron
81617	A	G	Intron
81788	G	C	Intron
81882	C	T	Intron
82932	G	A	Intron
84585	A	G	Intron
85092	T	-	Intron
85096	C	-	Intron
85100	T	-	Intron
85318	C	T	Intron
85467	C	T	Intron
85488	C	T	Intron
87268	A	G	Intron
89813	G	C	Intron
91487	T	-	Intron
92081	A	G	Intron
92888	A	T	Intron
93194	G	T	Intron
94938	C	T	Intron
95367	C	T	Intron
95495	C	T	Intron
95755	A	- G	Intron
97031	C	T	Intron
97176	A	G	Intron
97768	C	T	Intron
98400	C	T	Intron
99782	A	G	Intron
104080	C	T	Intron
104087	G	C	Intron
105134	C	T	Intron
105911	T	C	Intron
105944	C	T	Intron
105970	A	G	Intron
106134	G	A C	Intron
106148	C	T	Intron
107058	A	G	Intron
107310	T	-	Intron
108283	A	G	Intron
109168	G	- T	Intron
110938	A	G	Intron
111713	G	A	Intron
113984	T	C	Intron
115302	G	T	Intron
115352	G	T	Intron
115804	C	G	Intron
115862	A	C	Intron
118203	A	-	Intron
124933	C	T	Intron
126402	C	T	Intron
127387	T	A	Intron
128453	G	A	Intron
128584	T	C	Intron
128680	A	-	Intron

129116	A	G	Intron
129549	A	C	Intron
129820	A	T	Intron
129934	A	G	Intron
132304	A	G	Intron
133008	A	G	Intron
133347	A	G	Intron
133374	T	C	Intron
133636	A	G	Intron
134315	A	G	Intron
136612	A	G	Intron
136839	C	T	Intron
136964	A	G	Intron
137136	C	T	Intron
139365	C	A	Intron
141321	C	-	Intron
141736	A	- T	Intron
142173	A	G	Intron
142337	G	T A	Intron
142788	C	T	Intron
146349	G	T	Intron
147030	G	T	Intron
147884	A	G	Intron
148673	T	C	Intron
149048	A	T	Intron
151229	A	G	Intron
151848	A	T	Intron
152415	A	G	Intron
152539	C	G	Intron
153191	A	G	Intron
153232	A	T	Intron
153817	A	T	Intron
156544	T	C	Intron
156579	A	G	Intron
157391	A	C	Intron
158718	A	G	Intron
160186	A	G	Intron
161108	G	T	Intron
162060	C	G	Intron
165993	A	T	Intron
166679	C	T	Intron
167136	T	A	Intron
173782	T	- A	Intron
176290	T	C	Intron
181889	A	G	Intron
182606	C	T	Intron
184663	C	T	Intron
185392	C	T	Intron
186612	T	C	Intron
187014	C	T	Intron
187090	G	-	Intron
187290	C	G	Intron
187862	T	C	Intron
187937	G	A	Intron
188286	C	T	Intron
188478	G	A	Intron
189156	A	G	Intron
189488	T	C G	Intron
189909	A	G	Intron
189910	T	G	Intron
194673	T	A	Intron
194808	T	C	Intron
194884	A	G	Intron



195290	A	-	Intron
195939	C	G	Intron
196291	A	C	Intron
196533	A	C	Intron
197176	A	G	Intron
199693	A	T	Intron
199734	G	A	Intron
201371	T	A	Intron
201433	T	C	Intron
201848	A	G	Intron
202730	G	A	Intron
204904	G	A	Intron
205171	G	A	Intron
205991	T	G	Intron
206052	C	G	Intron
207237	C	T	Intron
208791	C	G	Intron
208799	C	G	Intron
209076	C	T	Intron
209143	A	G	Intron
209185	C	G	Intron
209499	C	G	Intron
209614	G	T	Intron
209708	C	G	Intron
210292	A	T	Intron
212286	A	C	Intron
212767	T	C	Intron
212809	G	A	Intron
213100	G	A	Intron
215017	A	G	Intron
215021	C	T	Intron
215180	C	T	Intron
215370	A	G	Intron
215412	G	-	Intron
216552	C	T	Intron
217007	A	G	Intron
217549	A	T	Intron
217567	A	G	Intron
218100	G	T	Intron
219737	A	G	Intron
220681	C	T	Intron
221225	C	T	Intron
221960	A	C	Intron
222673	A	C	Intron
223053	T	C	Intron
223881	A	T	Intron
224236	G	T	Intron
224238	A	G	Intron
225653	T	C	Intron
226563	G	T	Intron
227365	G	T	Intron
228457	G	A	Intron
228488	A	G	Intron
228531	A	G	Intron
228665	A	C	Intron
230490	A	G	Intron
230976	T	-	Intron
236111	T	C	Intron
236317	A	-	Intron
236323	T	-	Intron
236325	G	-	Intron
236345	G	C	Intron
236534	C	G	Intron

238076	A	G	Intron
239545	G	A	Intron
247765	A	G	Intron
250858	T	G	Intron
251536	A	G	Intron
252599	A	T	Intron
252647	T	C	Intron
252649	G	A	Intron
252783	G	A	Intron
253875	A	G	Intron
254076	T	C	Intron
254547	G	A	Intron
254892	A	T	Intron
258431	G	A	Intron
261462	G	A	Intron
262167	G	T	Intron
263806	A	C	Intron
265167	A	G	Intron
265258	G	A	Intron
267127	T	C	Intron
268343	C	T	Intron
268640	C	T	Intron
269021	T	G	Intron
269429	C	A	Intron
269739	A	G	Intron
271247	G	-	Intron
272820	T	G	Intron
274065	G	A	Intron
276592	G	T	Intron
276628	C	T	Intron
279257	C	A	Intron
279925	T	C	Intron
280127	T	A	Intron
280433	C	A	Intron
282808	G	-	Intron
283120	G	A	Intron
283749	T	C	Intron
284339	G	T	Intron
284382	T	C	Intron
287120	C	T	Intron
287415	C	T	Intron
287683	A	G	Intron
287699	G	A	Intron
287723	A	C	Intron
287833	G	A	Intron
288000	G	C	Intron
288050	A	T	Intron
288331	G	A	Intron
288438	C	-	Intron
288625	C	T	Intron
288819	A	G	Intron
291274	T	C	Intron
292997	C	T	Intron
296708	A	G	Intron
296744	T	C	Intron
297548	A	G	Intron
298436	C	T	Intron
300652	T	C	Intron
300653	G	A	Intron
300747	G	A	Intron
300776	A	- G	Intron
300874	G	A	Intron
301027	T	A	Intron

301640	A	G	Intron
302581	G	A	Intron
304512	G	C	Intron
305258	G	A	Intron
307676	C	G	Intron
309692	T	-	Intron
311656	G	T	Intron
311776	G	A	Intron
311901	G	A	Intron
312574	G	T	Intron
312593	C	T	Intron
312694	T	G	Intron
313283	A	G	Intron
313403	A	G	Intron
313982	A	G	Intron
314043	G	A	Intron
314103	G	A	Intron
314832	G	T	Intron
315368	C	G	Intron
315431	T	C	Intron
315993	T	-	Intron
316107	A	G	Intron
316352	C	G	Intron
319520	G	A	Intron
319699	A	C	Intron
320863	G	A	Intron
321530	T	C	Intron
323257	A	G	Intron
323754	A	G	Intron
324544	A	G	Intron
324599	A	C	Intron
324921	C	T	Intron
327295	C	G	Intron
330836	G	A	Intron
331239	T	-	Intron
331612	T	C	Intron
331823	C	T	Intron
334749	A	G	Intron

Context:

DNA

Position

1107 TGGACCCAGACCAAACTGTGTGATGCCAAGACCGCGCTGGCCCATTCACCTGCTGTATC  
TCTAGCAACTATTAATAGCACAGTGCCTGCTGCATTGGAGGGGTTTCAGCGGCAGGAAAT  
CTGTGGAAGGAAAAACAAACGTAATATCTCTTTCTTCAGGTCAGCCTTCCATTATTCTT  
CCCCTTTTCCTTATATTTAACTAACTTCATCCTCAGAAAAATCCCCCTGTGCACCTCCCC  
CCGGCCAGGAGAGATTACAGAGGCATGGACAGAACACTGTTACCTAAGCCAGGAAGGCC  
[C, T]  
CTGGTGCCACGCAGCCAGAGCAGGAGGCAGGCCCTCAGAAAGTCTCCTGGCCATCAGCC  
TGGCCTGGGTAGGGGCTCCCTCCTAAGTTTCTGCCAGACTGAGGCTACGTATGACCATT  
TATGGGCCCCCTAGTTGTTACAAAGGTGTTCCAGTTCATTTCGGAAGGAAGACTGATCTC  
AAAAGCTGCTGATGTTAAAGAGGGATTACAGAAAGTTTGGGAGCCCCAGGCTTGGGGATG  
GGATCAGGATGGGGAAATATCCTGTTCTAAGGGAGAAGGGACCCTCTGGGCCCAGCTAGG

5479 GCCAACATGCCATGTATGAAATGCTACACACCTACAGTGTGTGTAGGGCAGACACTTTTT  
CATTTGGAAAGGTTGAGAATGCAGATGCTTCAGGGTCACAAATCTGACTGTTCTCTTCAA  
GGCTGGGTGGCATTGCTTGGTTCTGCCAAATCATCTTTGTAATTTCTGGTCCTGTTGATT  
ACAAAAAGAAGCCATTCTGTATGGCTAATCCTTAATGGCTAGTCTGGTAAAGTTACCAA  
GTTCTGGGAGAGAGGCTGAGAGAGAGAATGGATGAACAATGCCACCGAAACTCTGAGGGC  
[C, G]  
AGAATTCCCATTCTTCCCAACAGGGCTGTTTCTGGAATAGAAAGAGAAGTTTGTATTAA  
ACCCATTGCCAGTTTAATGGGATTGCTTCTCTGCGCTATGAACTTGGTCAATAAAGAC

AGCTTACATGCCTGTGTGCGTTCTCTGGGTGGGGCAGATTTTGGTATTTTCATATGAATA  
CCTATTTCTCCCTAACAAATTTGCATTCTTATTCATGCTTTTTCAGCTTTCTTCAAAAAG  
CAAGTCAGTATTTGGAATGTTACATCATACTAACCTGTAATACCTCTGTAATTCTAAATA

5480 CCAACATGCCATGTATGAAATGCTACACACCTACAGTGTGTAGGGCAGACACTTTTTC  
ATTTGGAAAGGTTGAGAATGCAGATGCTTCAGGGTCACAAATCTGACTGTTCTCTTCAAG  
GCTGGGTGGCATTGCTTGGTTCTGCCAAATCATCTTTGTAATTTCTGGTCTGTGATTA  
CAAAAAGAAGCCATTTCTGTATGGCTAATCCTTAATGGCTAGTCTGGTAAAGTTACCAAG  
TTCTGGGAGAGAGGCTGAGAGAGAGAATGGATGAACAATGCCACCGAAACTCTGAGGGCC  
[A, G]  
GAATTTCCCATTTCTTCCCAACAGGGCTGTTTCTGGAATAGAAAGAGAAGTTTGTATTAA  
CCCATTGCCAGTTTAATGGGATGCTTCTCTGGCCTATGAACTTGGTCAATAAAGACA  
GCTTACATGCCTGTGTGCGTTCTCTGGGTGGGGCAGATTTTGGTATTTTCATATGAATAC  
CTATTTCTCCCTAACAAATTTGCATTCTTATTCATGCTTTTTCAGCTTTCTTCAAAAAGC  
AAGTCAGTATTTGGAATGTTACATCATACTAACCTGTAATACCTCTGTAATTCTAAATAC

6100 TATTAGCTTATTTTAGAACACCTGAAATCCTGTGGTTTTTCAAGGAGGTAGACAATCT  
AGTGGAGGTCCTTCAGCATTGAGAAAAGCAAAATCTGCCTATCTAAACAAGAATCCAAA  
CTCCCACTCTAGATGTAAGTGTGCCATAATATAAGGAACCAACAGTTGCCCTGGGGGCA  
GGATGCCTGGGTTCAGTTTAGGCCTAGCCACTGATTTGTCCTTGAACCTGGGTGGATTCT  
GTCCACCTTCTGGTCTTCTGGTGTCTATCTATGCGGCAGCCAGGTTAGCACCAGGTTCT  
[C, T]  
CTGACTGGGGGAATGTCTGTTGAAGCTCTGGTAGGAAACCACAGGGGAAGCAATGAAACA  
CCTCCCTTCCAAACAAGATGGTTAAAGCATCAAGTCAGTGTACTTTATGACTTGTTTGGA  
ACAAAAGGTAGTCTCAGCTCTTTATATGGGGACAGTCCTAGGTAGATTTATAATTAATAC  
TTAGGGCTTAGCAAGGATTGAATGAACTTATTAATCTAAATTGATCTCAAAAGGAGCTC  
TAGGTTTAAAGGGGATTGTGACCTTATGGATGGCACCTTCCCAATTCTATAATGGGGA

6122 TGAAATCCTGTGGTTTTTCAAGGAGGTAGACAATCTAGTGGAGGTCCTTCAGCATTGA  
GAAAAGCAAAATCTGCCTATCTAAACAAGAATCCAACTCCCACTCTAGATGTAAGTGT  
GCCATAATATAAGGAACCAACAGTTGCCCTGGGGGCAGGATGCCTGGGTTCAGTTTAG  
GCCTAGCCACTGATTTGTCTTGAACCTGGGTGGATTCTGCCACCTTCTGGTCTTCTGGT  
GTCCTATCTATGCGGCAGCCAGGTTAGCACCAGGTTCTCCTGACTGGGGGAATGTCTGTT  
[G, A]  
AAGCTCTGGTAGGAAACCACAGGGGAAGCAATGAAACACCTCCCTTCCAAACAAGATGGT  
TAAAGCATCAAGTCAGTGTACTTTATGACTTGTTTGGAACAAAAGGTAGTCTCAGCTCTT  
TATATGGGGACAGTCCTAGGTAGATTTATAATTAATACTTAGGGCTTAGCAAGGATTGAA  
TGAACTTATTAATCTAAATTGATCTCAAAAGGAGCTCTAGGTTTAAAGGGGATTGTG  
ACCTTATGGATGGCACCTTCCCAATTCTATAATGGGGAGATTCTTGCAATTGCCTCTATC

6883 TCCCTTCTTTCCTTCTACCGTATTTTTTCTTAGCCATAAATAGAGCAGCAGTGAGGACT  
GAGGAGAGTCTGCCCAGGGGCCCCCATCCCGGGGTAGAATGTGGGAATTAAGGGTGAGCA  
GCTTGGCTCTCTGCCCTTGGTTGGAGCCATGAGGAGGAGAGTAGCTCGTGGCAGCTTTCA  
GAGGAAAGGAGAGTCTCGGGGCCAGGGCTCCTATCTTACTGTCTCTAGATTTTCCCAT  
TATACTAAAAACAACGTATTATCAAAACAAAACAGGCAGGACAAAACAAACAGACAGGC  
[A, G]  
GCAGCAGGTGGGAGTTAAGAGAATAGATGTCGTGGGTCTACGTGCCTGACTTGGAATTT  
AGTTTGGCACTTGTCTGCCACATGGCCTTGGCAGAGTCCCTAACCTCTCTGTGACCCCA  
TCTCCTCTTTCATCTGATTGAGGGATAATCATTGCCCCCATCATGGAGTAGAAAAAGGAG  
GGTTATGAGTTAATACCTGTGAAGTGCTTAGAACAGTGCCTGACACATCGTAATTGCTAT  
ATAAGTGTTAACCAATAGATAGTCTCTATTTGATTATTAGACAGATAATCAAAATTGAT

7641 CTAGTGGTAGACAGACTGAGCTAAACTTTACAAACAAGCTGCCAGGAGTATTTAGTAG  
TTGGCCTGGCTCATGTGTTTTCTGTTTCCAGAGTTTCTGTGTTCCAGATACAATCTTA  
CAGGAAATATAAACACAAACCAGATAAAACCAGTGGCAACTCCAGGCCAAGCTCCAGGCT  
TGGATCTTGGGCCTCCTGAAACACAACCCAGAAACCAGCAGTCTTGGTGCATCCTCTTAT  
GAACGTGATTGGCGCTTGCCAAAATCACAGTTGAAATGAATATATTTTATTTAATGCTA  
[C, G]  
CCATTAGTACCAAAACATAAAACATAATTGATCTTAGATTACAAAGCAGATTAAAAGTTA  
AATACCAGATTTTGTGGCTTATGTATTTTCATAACTCCAAGAGTTGACATCTGTACATTAA  
CTAGAATAGATTTGGATTATCTTGCTGTTTTTTCGTTTATGTGAGCTAGGAGACATGGAAA  
GGGAGAAAAGTAGACCTTGCTCTGTGTGTTTACTCTGTGAGCAATGTTGATAGTAGATA  
AGTAGGACAAAATTAATGAGAATAAGAAGCAATGTCTTCTAGTTCTAGCTTAAATTTCT

8493 TCTCTATTAAAAATACAAAATTAGCTGGGCATGGTGGCGCATGCCTGTCATCCCAGCTAC  
TCGGGAGGCTGAGGCAGGAGAATCACTTGAACCCAGGAGGCGGAGGTTGCAGTGAGCCGA  
GATCGCACCATTGAACTCCAGCGCAGGCTACAAGAGTGAAACTCCATCTCAAGAAAAACA  
TAAAAACAGGTTGCAGTTAGGGGAAGACATTTTATTCTTAGTCCCGAATATGATTTTCT  
TTTCCTGCTCCTTCCCTGTAAGATTTACACACCCTAGCTAGATCACTGGATCAAGAG  
[C, T]  
GCAGAAGCCATTGGGGGGCAGGGGAGGGAGTGCCGTGACTGCCGCAGTCCCTCACAGTCC  
CTCCCGGGTGGCAGCTGAAGCGGCATTATTCCACTCAACTCTGCCTTCTTCAGAGTGTGG  
GGCAGGTGCTGATGGTGAGACTGTGACCTTCAGATTATATTTACTGACCACCCAGACTCT  
TTTCCTGGTAGCTCAGCTTTGTCAACAGATGTCAAAGATGAGTGACCGAAGAAACAGATA  
TAAGAGTGGGAGCTTATGGACTCTTTTAAAAACAAGCAGACACCTTCTCTTAAAGACAG

9626 ATCTGGTTATGTTTCATAATCAGAATACTGAAATTATGGTTGGACTGTGTTTACAGTGGA  
AACTTTTTTCCAAAAAGTACAGCTTATTGGACAAGTAAGATAGTCTGTATCCTCATTTT  
CTCAGCACAAATGCTTAGCACATGATTTGGACTTGAATATTTGTGTAGCTGATCCTTAGT  
TTTTTCATCCATGTGATTATTTGATTACCTTGAATTGCTCACTTCTTGTCTTTTAGGACT  
GTATACAGTAATGTTATCAAGTGAGCCTCAGGAAACACCTCAAAGGTTATTGAAATTCTG  
[T, A]  
TATCATTGGATGCTTGGATTCTGCCACAAAAATGGTTGGTCTTGAACTAAGATATTAG  
ACCTTATGATGCCATTTTGAAGCTCACTGTCTTATAAACTGAGGTGTGGCTGCAAATGA  
GGTGCCAGAGATGTAACATAATTCTTAATCATCATTTCTTTTTTTGAGACAAGAGTCTCA  
CTCTGTGCGCCAGGTTAAAGTGCAGAGGTATGATCTCGGCTCACTGCAACCTCCGCCTCC  
CGAGTTCAAGCGATTCTCCTGCCCCAGCCTCCTGAGTAGCTGGAATTACAGGTGCCTGCT

9627 TCTGGTTATGTTTCATAATCAGAATACTGAAATTATGGTTGGACTGTGTTTACAGTGGA  
AACTTTTTTCCAAAAAGTACAGCTTATTGGACAAGTAAGATAGTCTGTATCCTCATTTTCC  
TCAGCACAAATGCTTAGCACATGATTTGGACTTGAATATTTGTGTAGCTGATCCTTAGT  
TTTTTCATCCATGTGATTATTTGATTACCTTGAATTGCTCACTTCTTGTCTTTTAGGACTG  
TATACAGTAATGTTATCAAGTGAGCCTCAGGAAACACCTCAAAGGTTATTGAAATTCTGT  
[T, -]  
ATCATTGGATGCTTGGATTCTGCCACAAAAATGGTTGGTCTTGAACTAAGATATTAGA  
CCTTATGATGCCATTTTGAAGCTCACTGTCTTATAAACTGAGGTGTGGCTGCAAATGAG  
GTGCCAGAGATGTAACATAATTCTTAATCATCATTTCTTTTTTTGAGACAAGAGTCTCAC  
TCTGTGCGCCAGGTTAAAGTGCAGAGGTATGATCTCGGCTCACTGCAACCTCCGCCTCCC  
GAGTTCAAGCGATTCTCCTGCCCCAGCCTCCTGAGTAGCTGGAATTACAGGTGCCTGCTA

9796 GATCCTTAGTTTTTTCATCCATGTGATTATTTGATTACCTTGAATTGCTCACTTCTTGT  
TTTTAGGACTGTATACAGTAATGTTATCAAGTGAGCCTCAGGAAACACCTCAAAGGTTAT  
TGAAATTCTGTTATCATTGGATGCTTGGATTCTGCCACAAAAATGGTTGGTCTTGAAAC  
TAAGATATTAGACCTTATGATGCCATTTTGAAGCTCACTGTCTTATAAACTGAGGTGTG  
GCTGCAAAATGAGGTGCCAGAGATGTAACATAATTCTTAATCATCATTTCTTTTTTTGAGA  
[C, A]  
AAGAGTCTCACTCTGTGCGCCAGGTTAAAGTGCAGAGGTATGATCTCGGCTCACTGCAAC  
CTCCGCCCTCCGAGTTCAAGCGATTCTCCTGCCCCAGCCTCCTGAGTAGCTGGAATTACA  
GGTGCTGCTACCACGCCAGCTAATTTTGTATGTTTAGTAGAGACCGGTTTCACCAT  
GTTGGCCAGACTGGTCTCAAACCTCCTGACCTCAAGTGATCCATCTACCTCCGCCTACCAA  
AGTGCTGGGATTACAGGTTGTGAGCCACTGCGCCAGCCATAATCATAGTTTCTCGAGCA

9868 ATACAGTAATGTTATCAAGTGAGCCTCAGGAAACACCTCAAAGGTTATTGAAATTCTGTT  
ATCATTGGATGCTTGGATTCTGCCACAAAAATGGTTGGTCTTGAACTAAGATATTAGA  
CCTTATGATGCCATTTTGAAGCTCACTGTCTTATAAACTGAGGTGTGGCTGCAAAATGAG  
GTGCCAGAGATGTAACATAATTCTTAATCATCATTTCTTTTTTTGAGACAAGAGTCTCAC  
TCTGTGCGCCAGGTTAAAGTGCAGAGGTATGATCTCGGCTCACTGCAACCTCCGCCTCCC  
[G, A]  
AGTTCAAGCGATTCTCCTGCCCCAGCCTCCTGAGTAGCTGGAATTACAGGTGCCTGCTAC  
CACGCCAGCTAATTTTGTATGTTTAGTAGAGACCGGTTTCACCATGTTGGCCAGACT  
GGTCTCAAACCTCTGACCTCAAGTGATCCATCTACCTCCGCCTACCAAAGTGCTGGGATT  
ACAGGTTGTGAGCCACTGCGCCAGCCATAATCATAGTTTCTCGAGCACTAATTGTGTGC  
CTAGCCCCAATGCTTCTCAGGAACTAAGGCGTGGCTATATGGCAGCCTAATAGAGGT

10209 GAATTACAGGTGCCTGCTACCACGCCAGCTAATTTTGTATGTTTAGTAGAGACCGGT  
TTCACCATGTTGGCCAGACTGGTCTCAAACCTCCTGACCTCAAGTGATCCATCTACCTCCG

CCTACCAAAGTGCTGGGATTACAGGTTGTGAGCCACTGCGCCAGCCATAATCATAGTTT  
 CTCGAGCACTAATTGTGTGCCTAGCCCCAAATGCTTCTCAGGAACTAAGGCGTGGCTA  
 TATGGCAGCCTAATAGAGGTGACCCACCTGCCTCACCTGGTTTGTCTTATAGATGTAA  
 [T,C]  
 GGTAGGTGGCATTTCAAATGGGTTTCCACGTAACAGCATTATATAGAGTTCTTACTCTATG  
 CTAAGCACTAAGTCCCTTCAATCCTCACAAAAGCCTTTCGAGTTACATATTATTGCCATTT  
 TAGAAATAAGTAACTAAGGCTCAGAAGTAATATAACCTCTCCAAGGTAGAACAGAAGTT  
 TGGTGCCAGGATTTAAACCCAGGCTTATCTGATTCTGGGGAACACATACTAACTCACTGT  
 GACTTATTATATCCATCTCATAATGTTTTATTCTCAGCATTGTTCATTTCTTCAACAGAC

10311 GTGATCCATCTACCTCCGCCTACCAAAGTGCTGGGATTACAGGTTGTGAGCCACTGCGCC  
 CAGCCATAATCATAGTTTCTCGAGCACTAATTGTGTGCCTAGCCCCAAATGCTTCTCAG  
 GAACTAAGGCGTGGCTATATGGCAGCCTAATAGAGGTGACCCACCTGCCTCACCTGGT  
 TTGTTCTTATAGATGTAATGGTAGGTGGCATTTCAAATGGGTTTCCACGTAACAGCATT  
 ATAGAGTTCTTACTCTATGCCTGACACTAACTCCTTCAATCCTCACAAAAGCCTTTCGAG  
 [T,G]  
 TACATATTATTGCCATTTTAGAAATAAGTAACTAAGGCTCAGAAGTAATATAACCTCTC  
 CAAGGTAGAACAGAAGTTTGGTGCCAGGATTTAAACCCAGGCTTATCTGATTCTGGGGAA  
 CACATACTAACTCACTGTGACTTATTATATCCATCTCATAATGTTTTATTCTCAGCATTT  
 GTCATTTCTTCAACAGACTCATCAAATGAAACCAGGAGGCTTTTGGCTGCATCTCACAC  
 TGCTCGGAGCCTCCCTGCGGCTGCGCTGGGATGGATGGACCCAGGAACAGCAGAGGCC

10831 GCTTTTGGTGTCATCTCACACTGCTCGGAGCCTCCCTGCCGGCTGCGCTGGGATGGATGG  
 ACCCAGGAACCAGCAGAGGCCCGGATGTGGGTGTGGGGGAGTCACAGGCAGAGGTATAGT  
 CAAATCCCTGCGGACATAACATTTCAAACGATTGCTTCCGATGTTACAGTATCTGATT  
 TCCCTCCACCTTTAGTTTAGATCAGTTAGATCACAAAGTGAATTAATAATGCACTTCCT  
 TTTTGGTGGGGACAGAAGAAGGCAACCTGTGTGGATACAGACAAGAGGTTGATAACACGA  
 [C,T]  
 GTGAGTAATGGCTCTAAAACCTCTCAGATGCTGAAAGTGTATTCCGAAACCAAGCTTGAA  
 TTGCCTGGTTAGTCTCTACAAAGACCCCTCAGGAGAATGGCTTTCTGTATATTTAATAAA  
 ACTCTGAAAATGCAGAGTAATTGGTGGAGCACACCCATGTGAATTAGTGAAGTATTTTAA  
 TTATAAAATATATTTGAAAAGAAATGGACTACTTTTCAGGTATATAGATAGAAAGCACCA  
 GGCTGAGAAAGAACTGGCAAGTGGAGGTCTTAAGGGAGAGTGCTTTAATGAACAGATAAG

12230 TCACTTAAATCCTACACATATATTGTTGAATATTTAATAGCAAAGCAAACAGACAAACAC  
 ACAGGTAAAGCTTAGTCTTCTTACTATTGGGGCTCATCGGCCACTGTTTTAAACCACTTA  
 TTTCAAATAAAAGTATCAAGTCAATTAAGGTGGGATTTAGCTGGAGGTAAATTGAAGGTA  
 AGTTAATATCAACCCAGGGCCTCTTTATCTTAGCTGTTAACACCCTAATTCTTTGTGTGC  
 CAACAAGAAGGAGCAGATGCTGGTCATTGGGAGGAAGTAACGCTTTTTGGGGGTTGTTAT  
 [C,T]  
 TTGCTCCCTGCAACCCCTGCTCCAGGGTAGCTTTTGTCTTCCAAGTCCAGGAATGTTGC  
 TGCTTCAGGAAAGGGAGGTGATGACTGTGTAGATTCTGCACCACAAGAACTATTGCCCTA  
 TTGATCATATATATAGTTTTTGTCTATAGCTTTTGTCTTTCAGTATATAACTTCTAAT  
 CATTGAAACTGTTTCTATCAGTGATTAAATGAGATGATAAATGGGAATGGGCCTAGGG  
 CTTAGGATGGCCTAGGTTAAAGGTTTAGCTGCAGAGAACAGAACCTTCCAGGTACGGTG

13378 TCACACCTGGTCTCTTTTTCTGAATTCCTTAGTCCTTCCTTTCTCTTTTGTCTTTCTTACT  
 CTTTTATTTTTACGTTAGCATATGGATGGAGCCTGTCTTATTTATCTTTCTTCCTTACA  
 GTGCCTAATAATTTTATAAGCAAATAGAGGTTTGATGCATTTTTAAGCCAATCGATATT  
 TATGTGACCTTTGGTCTGGTCATAAAGTCACTCTGGTGCTTCCAAATTCAGACCAGAC  
 CATCAGGTATTTAGCGCAGGGCATACTCCCTGCACAGCAGGTTTCATTCAGTGGGGA  
 [C,T]  
 GTGGATGGTTTTTCCCCAGCAAATCTGTGAGCAGCCTGCAGGCCGACAGGCTTGATCCT  
 AATATCCAAGATAGTCCTTGCCTGTTATAGTTTCTGGGTAGTTTATTATTGAACTGTAG  
 CTATTAATGTATCGATAACTCACAGTCCAAACCATATTAACTCCTCTAGCAGTTTCTGC  
 AGACAGTCTTATTTCTGGAAGAATCAAACAGCAGAGTTTCTGAGACTCTAAATAAG  
 TGAATAACCTTTTTTCAAGAACAGATATTAAATGTTTCTGCATTTCTTCCAGTAGTAG

13423 TTTTGTCTTCTTACTCTTTTTATTTTTACGTTAGCATATGGATGGAGCCTGTCTTATTTAT  
 CTTTTCTTCCTTACAGTGCCTAATAATTTTATAAGCAAATAGAGGTTTGATGCATTTTT  
 AAGCCAATCGATATTTATGTGACCTTTGGTCTGGTCATAAAGTCACTCTGGTGCTTCCA  
 AAATTCAGACCAGACCATCAGGTATTTAGCGCAGGGCATACTCCCTGCACAGCAGGTT  
 CATTCCCAGTGGGGACGTGGATGGTTTTTCCCCAGCAAATCTGTGAGCAGCCTGCAGGCCG

[G, -T]  
ACAGGCTTGCATCCTAATATCCAAGATAGTCCTTGCGTGTTATAGTTTCTGGGTAGTTTA  
TTATTTGAAGTGTAGCTATTAATGTATCGATAACTCACAGTCCAAACCATATTAAGTCC  
TCTAGCAGTTTCTGCAGACAGTCTTATTTCTGGAAGAATCAAAACCAGCAGAGTTTCCCT  
GAGACTCTAAATAAGTGAAAAACCTTTTTTCAGGAACCAGATATTAAGTGTCTGCATT  
TCTTCCAGTAGTAGTACTTCACACAAATACTCATTGACTTAAGATTTTTAAAGTACTTA

13425 TTGTTTTCTTACTCTTTTATTTTTACGTTAGCATATGGATGGAGCCTGTCTTATTTATCT  
TTTCTTCTTACAGTGCCTAATAATTTTATAAGCAAAATAGAGGTTTGATGCATTTTTAA  
GCCAATCGATATTTATGTGACCTTTGGTCCCTGGTCATAAAGTCACTCTGGTGCCTCCAAA  
ATTCAGACCAGACCATCAGGTATTTTCAGCGCAGGGCATAACCTCCCTGCACAGCAGGTTCA  
TTCCAGTGGGGACGTGGATGGTTTTTCCCAGCAAATCTGTGAGCAGCCTGCAGGCCGA  
[G, -, C]  
AGGCTTGCATCCTAATATCCAAGATAGTCCTTGCGTGTTATAGTTTCTGGGTAGTTTATT  
ATTTGAAGTGTAGCTATTAATGTATCGATAACTCACAGTCCAAACCATATTAAGTCCCTC  
TAGCAGTTTCTGCAGACAGTCTTATTTCTGGAAGAATCAAAACCAGCAGAGTTTCCCTGA  
GACTCTAAATAAGTGAAAAACCTTTTTTCAGGAACCAGATATTAAGTGTCTGCATTTC  
TTCCAGTAGTAGTACTTCACACAAATACTCATTGACTTAAGATTTTTAAAGTACTTAGA

14070 TTACTTGATTGACCTAAGGGTAAATAAGAATTAATGACCAACGCGTGTGTGTCACATA  
TTTTTAAAGCAATTATAGCAAGTGTTAAATTATTGTTTTATGTACAAAGACTGCAGTGGA  
AATAGTTTCAAGGAGTTTACCATTTTACAGACATAGATAAAAAGAAATACAGCTGGGTGG  
AGTGCCTCTTTCATAAGAGTGGAGTGGCAGAACGTGCCCTAGAATACTAATGGAATTCGT  
AATTCAGAGGAAACAATTCTGAGAGGTACAATTTATTGAAATAATGAAATGTTGTTATAT  
[C, -]  
CCCCCCCCCTTTATCCTACACAGATGCATTTTGACTTATGACGGGATTACATCCAAATAA  
ACCCACTGTAAGTTGAAATATCATAGGTGAAAATGTATTTCATACACCTATCCTACCA  
AACATCGTAGCCTAGTCTGACCTGCCTTCAGCATGCTCAGAACACTGACATTAGCCTACA  
CTTAGGGCAAAATCATCTAACACAAAGCCTATTTTATAATAAAATGTTGAATATCTTATG  
TAATTTATTGAATACTGTACTGAAAGTGACAAACAGAAGGGATGTATGGGCACTTAAAG

14116 TGTGTGTGCACATATTTTTAAAGCAATTATAGCAAGTGTTAAATTATTGTTTTATGTACA  
AAGACTGCAGTGGAAATAGTTTCAAGGAGTTTACCATTTTACAGACATAGATAAAAAGAA  
ATACAGCTGGGTGGAGTGCCCTCTTTCATAAGAGTGGAGTGGCAGAACGTGCCCTAGAATA  
CTAATGGAATTCTGAATTCAGAGGAAACAATTCTGAGAGGTACAATTTATTGAAATAATG  
AAATGTTGTATATCCCCCCCCCTTTATCCTACACAGATGCATTTTGACTTATGACGGG  
[A, G]  
TTACATCCAAATAAACCCTGTAAAGTTGAAAATATCATAGGTGAAAATGTATTTTCATA  
CACCTATCCTACCAAACATCGTAGCCTAGTCTGACCTGCCTTCAGCATGCTCAGAACACT  
GACATTAGCCTACACTTAGGGCAAAATCATCTAACACAAAGCCTATTTTATAATAAAATG  
TTGAATATCTTATGTAATTTATTGAATACTGTACTGAAAGTGACAAACAGAAGGGATGTA  
TGGGCACTTAAAGTACGATTTCTACTGAATGTGTATCATTTTCATACTATGCTCATGTT

14508 TGACCTGCCTTCAGCATGCTCAGAACACTGACATTAGCCTACACTTAGGGCAAAATCATC  
TAACACAAAGCCTATTTTATAATAAAATGTTGAATATCTTATGTAATTTATTGAATACTG  
TACTGAAAGTGACAAACAGAAGGGATGTATGGGCACTTAAAGTACGATTTCTACTGAAT  
GTGTATCATTTTCATACTATGCTCATGTTGAAAATCCTAAGTCAAACCAAACCTAAGTC  
AGGGACTGTCTGTACACTGGTCAAGATAAATATAGTAGTAAATCAATATTGATAGAATT  
[C, T]  
TGTATTTGAGGGGAACCAAGGAACCAGGAAGGGGTGAGAAGTGATATGGTAGCAGCCTC  
CAGAGAGCATACCTGCTTTTGAGAAATAGGCATTTGTGGGAGCCCCCACTTTTGGGGCC  
TGGGTGCTGCAGTGGCCGCCCCCACTTTTGCAGCCTGGGTGCTGTGGCGGGAGCCTCC  
CCTTTTGGGGCTAGGGTGCTGCCATTGGAGCCACCCCACTTTTGGGGCTGGGTGCTATG  
GTGGGAGCCTCCCACCTTTTGGGGCCTGGGTGCTCGTGTCCAGCACCAGCATCTCACCCAT

14645 AGAAGGGATGTATGGGCACTTAAAGTACGATTTCTACTGAATGTGTATCATTTTCATAC  
TATGCTCATGTTGAAAAATCCTAAGTCAAACCAAACCTAAGTCAGGGACTGTCTGTACAC  
TGGTCAAGATAAATATAGTAGTAAATCAATATTGATAGAATTTTGTATTGAGGGGGAA  
CCAAGGAACCAGGAAGGGGTGAGAAGTGATATGGTAGCAGCCTCCAGAGAGCATACCTGC  
TTTTGAGAAATAGGCATTTGTGGGAGCCCCCACTTTTGGGGCCTGGGTGCTGCAGTGGC  
[A, C]  
GCCCCCACTTTTGCAGCCTGGGTGCTGTGGCGGGAGCCTCCCCTTTTGGGGCTAGGGT  
GCTGCCATTGGAGCCACCCCACTTTTGGGGCCTGGGTGCTATGGTGGGAGCCTCCCCTT

TTGGGGCCTGGGTGTCGTGTTCCAGCACCAGCATCTCACCCATTGCTGGGCTCTGAGAT  
TGAATGGTGGGCGTTACATGGTCTTATACGTCTTTCATGCATTTTACTGAACCTTTTCTA  
AACGACTCTTACCCATGGCATATACATAGTCACGTACTACATACCTGTACATGTTAATAT

14932 GTGCTGCAGTGGCCGCCCCCACTTTTGCAGCCTGGGTGCTGTGGCGGGAGCCTCCCC  
TTTGGGGCTAGGGTGTCTGCCATTGGAGCCACCCCACTTTTGGGGCCTGGGTGCTATGGTG  
GGAGCCTCCCCTTTTGGGGCCTGGGTGTCGTGTTCCAGCACCAGCATCTCACCCATTG  
CTGGGCTCTGAGATTGAATGGTGGGCGTTACATGGTCTTATACGTCTTTCATGCATTTTA  
CTGAACCTTTTCTAAACGACTCTTACCCATGGCATATACATAGTCACGTACTACATACCT  
[G, A]  
TACATGTTAATATTGATTCTTTCTTAAATTGTCACCTCATGTGCCTCAGTGCTTATAGAC  
CAGAGATAGGTTTGGAGCTCAGACACCATGGGTTTTCAGTATTGCAAATTCTCTCAAAG  
TAAAGTCTTTGCAGAAGAAATATGTGGAGTGGTGTGAGCTAACTTAAACATGATTCCCCG  
CCTCCCTAACCTCAGGGGTGAGCCTAAGACAGCATTGATCCTACCCTGACTGACCGGGCC  
CTTCCCCTTGCTACAAGTGTGATGGCAGGCATGACACTCCTGTCCCCGCGAGGCATGGC

16272 TATAGACGTTATCAGTACATTTATAATTTTCAAGGCAAATGATGGTGGCAGAACCTCCCC  
AGGTCTCAGGGGCATTGGGATTAACCCATTCCCAATTGCAGAATGGGGTGTGCTGTAACC  
TGTGCCAGCACCTCTTGAGATGCAATGTGCTTGTGAACGGTCTGGGATCTTGTTAAAATG  
CAGATTCTAATGCAGCAAATCTGAGGTGGGTCCCAAGATTCTGAGCTCCAGGTGATGCTG  
ATACTTCAGATCCTGGGGGACACTGGGAAGAAAAGCCTTAGAGGAGCCCCCTGCCTCCTC  
[C, G]  
CATGCACACACACAAGGAGAATCCAGTTGGATTGACTCTGGCCTTTTTTTAGTTCTTGC  
TGACATGATGCTGACTGCAGTCAGGGAAGAGAGAAAATGGGCAGGCTGCAGTCATGCTG  
GAAAATAGCTTGATGAGACTAGCTTAGTGGGCAGGTAGGTGATGGGAAAGATGAACTTAA  
ACAACCTTGGTCTAGGGTCATTTGCACCTGTTTTCAAGCAGCTGGACAGGTAACCTCTCA  
CTCTTGAAACCCGTGGCTCCTCCCTGGCTTGTCTGTAGGTGGTTTTAAATTCTGAAAGAG

16945 CCACCGTGGCTCCCCTTCTGGTGTCTATCCCATCTCTGTCCCTAGGCCAGCCAGCCTG  
TTTTGGGGATGAGCATTGCTGCATTGGTGAGCTGTTTTGGAGTCTTGTTTTCTCTTTAT  
CCTTGAACAGGGAAAGTCACTGTCTTTGTTCTTTGTGCTCTCCACTGCTCCAGCCAG  
CCCTTCCACACTGTACCAGTTAGTGCAGTGTGTGCCTCTTTGGTATTTTGAGATCATAGT  
TGACAATTTTAATTGGCCCTGAAAAGTTCTGTGACCCAGGAAAATGAGCATTTATGAGTT  
[C, T]  
ACAGAAACCCATTATTTTTCTTCTCTTAATTTAGCATTTACTTGTCTAACTACTTTATT  
TATTCCTCTGTTGCTAAATTATCTATACTCCTGTAGGAACTTCCCACCCTTGTAATGAA  
GACATCAGGCTGTGCATTGTAAATGGGGCTCCAATTTCTATTTTTCGGGGAGTTGGCAGC  
ACAGATCTGCCAAGTCCCAATCATCTGCTTGATTTATCCCCTACACCCTGTGGGTGTTG  
CTTTTGCTTCCCATTGGATGGAAGTAAATGTCGTCCTTGTGTGAGGCAGGCTCTAACAA

17065 CCTTGAACAGGGAAAGTCACTGTCTTTGTTCTTTGTGTCCTCTCCACTGCTCCCAGCCAG  
CCCTTCCACACTGTACCAGTTAGTGCAGTGTGTGCCTCTTTGGTATTTTGAGATCATAGT  
TGACAAATTTTAAATTGGCCCTGAAAAGTTCTGTGACCCAGGAAAATGAGCATTTATGAGTT  
CACAGAAACCCATTATTTTTCTTCTCTTAATTTAGCATTTACTTGTCTAACTACTTTAT  
TTATTCCTCTGTTGCTAAATTATCTATACTCCTGTAGGAACTTCCCACCCTTGTAATGA  
[A, G]  
GACATCAGGCTGTGCATTGTAAATGGGGCTCCAATTTCTATTTTTCGGGGAGTTGGCAGC  
ACAGATCTGCCAAGTCCCAATCATCTGCTTGATTTATCCCCTACACCCTGTGGGTGTTG  
CTTTTGCTTCCCATTGGATGGAAGTAAATGTCGTCCTTGTGTGAGGCAGGCTCTAACAA  
GGCCCAATGAGTGGGCTCTACTCTTCAGGCCTGCCAAGCCAGAGCCATTGTCTTCTGCC  
TCCATGGCTGTGGTCTCTGCCACTGGCTCCTGGGCTTTGTCTTGTACCAGCCACCTGGG

17442 CCAATCATCTGCTTGATTTATCCCCTACACCCTGTGGGTGTTGTGCTTTTGCTTCCCATT  
GGATGGAAGTAAATGTCGTCCTTGTGTGAGGCAGGCTCTAACAAAGGCCCAATGAGTGGGC  
TCTACTCTTCAGGCCTGCCAAGCCAGAGCCATTGTCTTCTGCCCTCCATGGCTGTGGTCT  
CTGCCACTGGCTCCTGGGCTTTGTCTTGTGTCAGGCACCTGGGAGGTGGAGCATACTGG  
AACTAGACATGGAGGATGTGGGAGGATATGGGCCAGTGCTCTGAGCAGGCGACACCGAG  
[A, G]  
ACACTGTGGTGGGTGCTGGCACATTGGTGTGGGGGGAGGAAGTGGCCAGGTGGCTGA  
GAAGCCATCTGTCCACCAGCCTCGCCTCTCTCTTGATGGGTAGCCATCCTTTGGGGCATT  
CCCTTCAGTCAGGAAGGTCTGGAACAAGAGAAACCCAATGTCTTCTCCTAATAAAAAAT  
CAGCCTTGTTTTACTCCTGCCAGGAGTGTGTGCTCTTGGCAGAGGTGAAGAATGAGTGTG  
AGTGGCCTGCGGGGCTGAGGTCTTCCCTCAATCACAGGGTGAAGTTTTCAGTTTGTATCTTG



17475 GTGGGTTGTTGCTTTTGCTTCCCATTGATGGAAGTAAATGTCGTCCTTGTGTCAAGCA  
GGCTCTAACAAGGCCCAATGAGTGGGCTCTACTCTTCAGGCCTGCCAAGCCAGAGCCATT  
GTCCTTCTGCCCTCATGGCTGTGGTCTCTGCCACTGGCTCCTGGGCTTTGTCTGTCAAC  
AGCCACCTGGGAGGTGGAGCATACTGGAAC TAGACATGGAGGATGTGGGAGGATATGGGC  
CCAGTGCTCTGAGCAGGCGACACCGAGAACACTGTGGTGGGTGCTGGCACATTGGTGTG  
[C, G]  
GGGGAGGAAGTGTGGCCAGGTGGCTGAGAAGCCATCTGTCCACCAGCCTCGCCTCTCTCT  
TGATGGGTAGCCATCCTTTGGGGCATTCCCTTCAGTCAGGAAGGTCTGGAACAAGAGAAA  
CCCAATGTCTTTCTCTCTAATAAAAAATCAGCCTTGTTTTACTCTGCCAGGAGTGTGTGC  
TCTTGGCAGAGGTGAAGAATGAGTGTGAGTGGCCTGCGGGGCTGAGGTCTTCCCTCAATC  
ACAGGGTGAGTTTCAGTTTGATCTTGACAGGGGTGGGGTTGGGAGAGCTGGTGTGGT

17844 AGCCATCCTTTGGGGCATTCCCTTCAGTCAGGAAGGTCTGGAACAAGAGAAACCCAATGT  
CTTTCCTCCTAATAAAAAATCAGCCTTGTTTTACTCCTGCCAGGAGTGTGTGCTCTTGGCA  
GAGGTGAAGAATGAGTGTGAGTGGCCTGCGGGGCTGAGGTCTTCCCTCAATCACAGGGTG  
AGTTTCAGTTTGATCTTGACAGGGGTGGGGTTGGGAGAGCTGGTGTGGTGTCTTGCTT  
TGGTTAGGAGACTCTGAGAGCATTGTCTTCCCTTGCTCGGTGGGACCGGGCTAAGGTAGC  
[A, C]  
CCTGTCTACCTGCTTGATGTGTGTCTAGACACTGAGCCCTTGCTTTTCTTCTTTGTT  
CCAAGAGGGCCTTGGGTGCAAATCAAACCTTCTGGAGGGCTTAGCTGGAGACGGAAGC  
TGCCATTGTGTCTTTTGTAAATACTTTGAAGGTTAAGGTTTTGTGTTATTGGGATCT  
AGATTGAAAACGTGTGTATTTTCTTTTAAGAGTTGAGAATGGAAGTCATATTCTATT  
TCTTGCAAAAGCCCTTTCCAGAGAATCAGTGAGACCACAGTGTGATGTCAGCTG

17929 TGTTTTACTCCTGCCAGGAGTGTGTGCTCTTGGCAGAGGTGAAGAATGAGTGTGAGTGGC  
CTGCGGGGCTGAGGTCTTCCCTCAATCACAGGGTGAGTTTCAGTTTGATCTTGACAGGG  
GTTGGGGTTGGGAGAGCTGGTGTGGTGTGCTTGGTTAGGAGACTCTGAGAGCATTG  
TCTTCCCTTGGTGGTGGGACCGGGCTAAGGTAGCCCTGTCTACCTGCTTGATGTTGTG  
CTAGACACTGAGCCCTTGCTTTTCTTCTTGTTCAGAGGGCCTTGGGTGCAAATC  
[A, G]  
AAACCTTCTGGAGGGCTTAGCTGGAGACGGAAGCTGCCATTGTTGCTTTGTAAATA  
CTTTGAAGGTTAAGGTTTTGTGTTATTGGGATCTAGATTGAAAACGTGTGTATTTTC  
TTTTTAAGAGTTGAGAATGGAAGTCATATTCTATTCTTGCAAAAGCCCTTTCCAGAGAA  
TCAGTGAGACCACAGTGTGTGATGCAGCTGACAGAAGCGCCTCCACCTGTGAG  
GGAGTTGGCCTAGCCTCAGAGGTGACAGACGCTCCAGCACAACCCACGCTTCAGCCCCA

18283 TAAAATACTTTGAAGGTTAAGGTTTTGTGTTATTGGGATCTAGATTGAAAACGTGTGTG  
ATTTTCTTTTTAAGAGTTGAGAATGGAAGTCATATTCTATTCTTGCAAAAGCCCTTTC  
CAGAGAATCAGTGAGACCACAGTGTGTGATGCAGCTGACAGAAGCGCCTCCCCAC  
CTGTGAGGGAGTTGGCCTAGCCTCAGAGGTGACAGACGCTCCAGCACAACCCACGCTTC  
AGCCCCAGCCAGGGGCTTGGGCCCCCTGAAGCATGGCCTGCTTTTTTCAGAGGACGTCTCT  
[C, -]  
CCCTGCTCAGGCTGAAAGTCCTCAGTGCTTCTGGTGGCCTGCTTGGCTGGTGGCAGGGCT  
AGCTGCTGGTATAGGCAGGCTGATGTGCACGGCTCTCTAGGCTCCTGGGAGAAATGGCTG  
CTGTCTCTCTCCCCACCATAGAACCCTGTTAACTCTCACCTTGTGTGTTTCATGTTGCC  
ACTTTCTCTCCAGGATGTTTGTGTTTTAAACCCCAACAATTGGTTTTCTGTTGGGG  
CTAAATCACTTTGCCTCTTGCTGTGTGCCGCTAAGGCATCCCGGCCCTGCCTTTGC

18540 TGGGCCCCGTAAGCATGGCCTGCTTTTTTCAGAGGACGTCTCTTCCCCTGCTCAGGCTGAA  
AGTCCTCAGTGCTTCTGGTGGCCTGCTTGGCTGGTGGCAGGGCTAGCTGCTGGTATAGGC  
AGGCTGATGTGCACGGCTCTCTAGGCTCCTGGGAGAAATGGCTGCTGCTCCTCCCCCA  
CCATAGAACCCTGTTAACTCTCACCTTGTGTGTTTCATGTTGCCACTTTCTCTCCAGGA  
TGTTTGTTGTTTTAAACCCCAACAATTGGTTTTCTGTTGGGGCTAAATCACTTTGCCT  
[C, G]  
TTGCCTGTGCTGCCGCCTAAGGCATCCCGGCCCTGCCTTTGCTTCAAGTGCACCCTCAA  
CTCAGAGGGCCCCGAGGCTAAAATCTGTTTGTTCCTAGCCAGCTTTGGAGCTAAGGGA  
ATCGCCCTCTCCAGCCTTTAGGTTTGCCACGAGTGAATAACAGGCAATATAACAATACCA  
TTTTCAGGGTTGTGATGAGCACTAAGATGGTACATGAGGTGCCGGGCACAGATTGCCTCC  
ACAGAACACAACAGACAGAGCTGTGGTTTTGTGTTGTGATCCCAGAACCTCAGTCAGTG

18592 AGGCTGAAAGTCCTCAGTGCTTCTGGTGGCCTGCTTGGCTGGTGGCAGGGCTAGCTGCTG  
GTATAGGCAGGCTGATGTGCACGGCTCTCTAGGCTCCTGGGAGAAATGGCTGCTGTCTCT

CTCCCCACCATAGAACCTGTAACTCTCACCTTGTGTGTTTCATGTTGCCACTTTCTC  
CTCCAGGATGTTTGTGTTTTAAACCCCACAATTGGTTTTTCTGTTGGGGCTAAATCA  
CTTTGCCTCTTGCTGTGCTGCCGCTAAGGCATCCCCGGCCCTGCCTTTGCTTCAAGTG  
[C, T]  
ACCTCAACTCAGAGGGCCCCGGAGGCTAAATCTGTTTGTTCCTAGCCAGCTTTGGAG  
CTAAGGGAATCGCCCTCTCCAGCCTTTAGGTTTGCCACGAGTGAAATACAGGCAATATAA  
CAATACCATTTTCAGGGTTGTCATGAGCACTAAGATGGTACATGAGGTGCCCGGCACAGA  
TTGCCTCCACAGAACACAACAGACAGAGCTGTGGTTTTGTGTTGTTCATCCAGAACCTC  
AGTCAGTGGCTGTCAAGAAGACTGTGCGCCCTTCTGAGCCACAGTCTGATGTGTCAACT

18616 GGTTGGCCTGCTTGGCTGGTGGCAGGGCTAGCTGCTGGTATAGGCAGGCTGATGTGCACGG  
CTCTCTAGGCTCCTGGGAGAAATGGCTGCTGCTCCTCCTCCCCACCATAGAACCTGTTA  
ACTCTCACCTTGTGTGTTTCATGTTGCCACTTTCTCCTCCAGGATGTTTGTGTTTTAA  
ACCCCACAATTGGTTTTTCTGTTGGGGCTAAATCACTTTGCCTCTTGCTGTGCTGCCG  
CCTAAGGCATCCCCGGCCCTGCCTTTGCTTCAAGTGCACCTCAACTCAGAGGGCCCCGG  
[A, G]  
GGCTAAATCTGTTTGTTCCTAGCCAGCTTTGGAGCTAAGGGAATCGCCCTCTCCAGCC  
TTTAGGTTTTGCCACGAGTGAAATACAGGCAATATAACAATACCATTTTCAGGGTTGTCTAT  
GAGCACTAAGATGGTACATGAGGTGCCCGGCACAGATTGCCTCCACAGAACACAACAGAC  
AGAGCTGTGGTTTTGTGTTGTTCATCCAGAACCTCAGTCAGTGGCTGTCAAGAAGACTG  
TGCGCCCTTCTGAGCCACAGTCTGATGTGTCAACTTCAGCTGCTGCAGTTCTTGTCACT

20491 GGCTGAGGCAGGAGAATCGCTTAAACCCAGGAGGGCGAGGTTGCAGTGAGCCAAGATCAT  
ACCACTGCCTCCAGCCTGGGCAACAGAGTGAGACTGTCTCAATAAAAAACAAGTAGGCT  
TCTCTGCTTCATGCTTGAGTGTTCATGCCTGGCAGTATGGCTTAGGATCATATCTTTGTG  
TCCTGAAGCAGAAATTCCCATTGACTTTCTCTTATCCCTACCTAGAGGGTCTCTGAGCC  
CTGGGCTGGCTTGGCCAATCGGGACATCTGGTTGACTTAAATCTTAGTAATCAACAGACA  
[C, T]  
CCACTGAGCACCTAGCTGTGTGCCTGGCCCTGTACTAAGGCTGGCTAAGTGGTTGAAGAG  
AAATGGGATTTGTGATTCTATCCTTGAGGCTTGAGGGCCATTGGGGTGGGGTGGGAGGT  
AGGCAACACTGAGGTTCAATTTTGGCATTAGGTTTGGCGGGGACAAACATCCAAAC  
TTAATGATCTTTTTCTAGTCTGTATATAATGTGCAAAATTAAGATCTCAACTTTAGCCTAA  
AGAAAAGTGGGCATATTTATTAAGTAATAAAGAAGGAAGTACATCTTTATTAGAAAGAAG

22023 TGTGTGTAGAGATCACACGGTAACAGAGCAAGGAGGAGTGAGAGTTCAGGCTC  
TATTTAAAGCCAGCTCTCTTGGGAAC TAGTAGGTTAGGACTCACTCATTGCTGCAAGGA  
TGGCACCAAGCCACTCCTAAGGGATCCAACCTCATGACTCAGACACCTCCATTAGGCCCTC  
ACCCCAACACTGAGGTTCAAATTTTGGCATTAGGTTTGGCGGGGACAAACATCCAAAC  
CATAGCACCAGTTGTCCAGTAATTCTTAGGAACAGAAACACTTTTATGACCATGCTGACT  
[A, G]  
GAACAAAATTATCTGTGATTCTGTTATCCATTCCAGATGAGAATGGTATATATAATTTAA  
TCTGAATTTATTCAAAATGACTGTTCTTGTGTTACAAGTAAAGATGATCATGAAGTGCAC  
TGTACAAGAAATCTTATCTGATATCTCACCGTGGGATTATGAGAAAGAAGAAAGATCA  
TCACAAACAGCTTTAAGAATGTGGTGAGCACAATGGTGAGCGGCAATGCAGCACAAAGC  
ATATTTAGTTAGCAGCACAGGCCAAACCGTGGGTGACGTGAGAATTTAGCACAGAAATGC

22248 GACAAACATCCAAACCATAGCACCAGTTGTCCAGTAATTCTTAGGAACAGAAACACTTTT  
ATGACCATGCTGACTAGAACAAAATTATCTGTGATTCTGTTATCCATTCCAGATGAGAAATG  
GTATATATAATTTAAATCTGAATTTATTCAAAATGACTGTTCTTGTGTTACAAGTAAAGA  
TGATCATGAAGTGCCTGTACAAGAAATCTTATCTGATATCTCACCGTGGGATTATGAG  
AAAGAAGAAAGAATCATCACAAACAGCTTTAAGAATGTGGTGAGCACAATGGTGAGCGGC  
[A, G]  
AATGCAGCACAAAGCATATTTAGTTAGCAGCACAGGCCAAACCGTGGGTGACGTGAGAAT  
TTAGCACAGAAATGCGCTGGGTGGAAGGTGGGATTGGGAAGGACCTCTTGGAGGCAGAGG  
TACTTGGAGAGGAAGACCAGGATCTGGGTGGGCAGAGTATTAGAGTATTTAAGGAGGAGT  
AACCCCTCAGAGTCTAGGTGTAGGTGGAATAGGGCCATATCTGTCTAGGAGGGGAAACGG  
AACAGATTGGTTAAGGTGGGTATCTGGGTCTGTGAGCCAGGGGATTATCAGGGACGCTT

23118 TTTGAGTTCTGTCTGTATCCTCAGGTTCTCAAGGGGCAGAGCCTTATTGGCTCAGCTTGG  
GGAAATATCTTCCAGATCCATTTGCCTGTGGCCAGGAGGCAGGTCCAGTGGGTGAGGG  
GCCCTCCAGGGGCTCTGAGGGGAGGATGTGGGTGCAGCGCTGGGTGGCTCTTGTGAAGGA  
GTGGCAGGAGGTTATTGTGGGTGGAGGACAGTTGGTGAGGCTGCAGAGCCAGCCTCAAAC  
CTCTCAGCAAGCACACAGAGAAACGTGAGCCAAGTTGTATAAACATGGGGCATTATG

[G,C]  
AGTTGCATTTTTGGATCTTCAGAGCAGGGGTTGGCCCTGGCAGTAAGGCCTGCCTTGTGC  
TGTTAAATCTTTGCTCCCTGCTTTGTTTGCCTGCCTTCCTCTCCCTGTCTTGTGACGAC  
CCTCGCCATACCTACCTACCAACCCGGCCTGTCTGTGGCTGGGCAGCTCAGAAGCCCA  
ACTTATCCATTCCCTAGGATGTCCCTGCAGACAGGCTGTAAAACAGGCTTGGCCTCCACAG  
GCCGACTTGCATTTTGCCAGTCACTACCCTGGTCTCCCTCCATCCTGGTGCCAGTGCC

23789 GCCACAAGTTGGGTGATGGTGCCTAATGGGGGTGTTTAGGTAACGAAGGCTCCATGCTCC  
ATCCTCAGGAATGCCGATTACAGAAGGGCTTGAGACTGGGAATTGGATCTCTTGTCTCTCT  
GTCTTTGACCTTTACCATGGGAGTATGCAGCAAGGAGGCCTTTGCAAAATGCCAGCCCC  
TCAATCTTGGACTTCCCAGACTCCAGAACTGTGAGCCAATACATTTCTGTTTATTATAAA  
GTACCCAGTCTCAGGTATTCTGTTATAGCAGCAGAAAATGGACTAAGGCAGCCTGTGTCC  
[C,A]  
CGCCTGACCCTTCAAACCTCACTAAAGGGGAGCAGGCTTTGGTGCTCAGTTGTGGCCCTGT  
GACTCCAGAGATACATATCCTGTGGCTGTAGGGAGCTCCTTAGTGACGCTGCTTTGAGGT  
TTAGCTGGAATCATTCTTGGTAAGAAAGAGGGGTACATGGGAGGGGAGTCATGGCTTGA  
CCAGATGCCTCTTCTTAGAAGGTCCACCACCTGCCAAATCCAGCAAGCAAAATAGTTGA  
GCTGCTGTGGGATAATTTGGCCTGTATCATGGAAGACAAGATGAGATAGATGCACTCCC

23800 GGTGATGGTGCCTAATGGGGGTGTTTAGGTAACGAAGGCTCCATGCTCCATCCTCAGGAA  
TGCCGATTACAGAAGGGCTTGAGACTGGGAATTGGATCTCTTGTCTCTGTCTTTGACCT  
TTCACCATGGGAGTATGCAGCAAGGAGGCCTTTGCAAAATGCCAGCCCCCTCAATCTTGGA  
CTTCCCAGACTCCAGAACTGTGAGCCAATACATTTCTGTTTATTATAAAGTACCCAGTCT  
CAGGTATTCTGTTATAGCAGCAGAAAATGGACTAAGGCAGCCTGTGTCCCCGCTGACCC  
[T,A]  
TCAAACCTCACTAAAGGGGAGCAGGCTTTGGTGCTCAGTTGTGGCCCTGTGACTCCAGAGA  
TACATATCCTGTGGCTGTAGGGAGCTCCTTAGTGACGCTGCTTTGAGGTTTAGCTGGAAT  
CATTCTTGGTAAGAAAGAGGGGTACATGGGAGGGGAGTCATGGCTTGACCAGATGCCTC  
TTCTTAGAAGGTCCACCACCTGCCAAATCCAGCAAGCAAAATAGTTGAGCTGCTGTGGG  
ATAATTTGGCCTGTATCATGGAAGACAAGATGAGATAGATGCACTCCCCACCTCCCCAG

23930 GAGTATGCAGCAAGGAGGCCTTTGCAAAATGCCAGCCCCCTCAATCTTGGACTTCCCAGAC  
TCCAGAAGTGTGAGCCAATACATTTCTGTTTATTATAAAGTACCCAGTCTCAGGTATTCT  
GTTATAGCAGCAGAAAATGGACTAAGGCAGCCTGTGTCCCCGCTGACCCTTCAAACCTCA  
CTAAAGGGGAGCAGGCTTTGGTGCTCAGTTGTGGCCCTGTGACTCCAGAGATACATATCC  
TGTGGCTGTAGGGAGCTCCTTAGTGACGCTGCTTTGAGGTTTAGCTGGAATCATTCTTGG  
[T,A]  
AAGAAAGAGGGGTACATGGGAGGGGAGTCATGGCTTGACCAGATGCCTCTTCTTAGAAG  
GTCCACCACCTGCCAAATCCAGCAAGCAAAATAGTTGAGCTGCTGTGGGATAATTTGGC  
CTGTATCATGGAAGACAAGATGAGATAGATGCACTCCCCACCTCCCCAGTTCTGAATCT  
CAGCTTTGCTCCCAGCTAGATACAAAGTCTTATTGCATTAAAAATTTGTTTTTGTGTG  
ATATCTCTTTCTGTGTAGCCAAGAGTTAGAGAGGGCTAGGGAACAGGGACATCTCTAGG

24159 GATACATATCCTGTGGCTGTAGGGAGCTCCTTAGTGACGCTGCTTTGAGGTTTAGCTGGA  
ATCATTCTTGGTAAGAAAGAGGGGTACATGGGAGGGGAGTCATGGCTTGACCAGATGCC  
TCTTCTTAGAAGGTCCACCACCTGCCAAATCCAGCAAGCAAAATAGTTGAGCTGCTGTG  
GGATAATTTGGCCTGTATCATGGAAGACAAGATGAGATAGATGCACTCCCCACCTCCCC  
AGTTCTGAATCTCAGCTTTGCTCCCAGCTAGATACAAAGTCTTATTGCATTAAAAATTTG  
[T,G]  
TTTTTGTGTGATATCTCTTTCTGTGTAGCCAAGAGTTAGAGAGGGCTAGGGAACAGGG  
ACATCTCTAGGGTGAGGATGAAAGGGGGCAGTGTCATCTGGAGCTCTGGGCTGGAAGTCT  
GAATGCTCCTCTTATCTTCTCTTATAAGAATAAAGAGGAAGATCATGCCACTGCACCTC  
TAGCCTGGTGACAGAGCGACAGAGCAAGACTGTGTCTCAAAT

26339 GCACTTCTTTTACGGCTGGGTGCTATGCTGATTGCTGGGGGCACAACCAGGATGCTGTTTG  
TGGGTGGAAATTGGCAAGTGACAGCAGCTACCAGATACTGAGTGCTCTTTGCCCTCCTC  
TCTCAGCTCTCACTGCAGTCTCATAGACACTACCTACCTCATTTTGCAGATGAGGAAAC  
TGAAGCTCCTGGAGGTTAATGCCATGTATATGGTGACCCAGTGCCCGGGGTCTGGGGTGC  
AGGTGAGCCCCCTTTGTGTCTCGTGCACTGCAAGCCAGTGCCCCATTCTCCATGTCACC  
[G,A]  
GGAGGCTTCTCAGTCTGGCTGCTTGAGCCTACTCTTCCCACCTGCATCCAGTGAGTTCT  
GGATACTGAGCTGGCATCGGTCTCATGGAAGGCGAGTGTTGGGCTGCCCAAGCCATCCT  
CTGGCTCCACTGACTTGTGGAAGAGAACTGGCACCAGTGTACATTAGTTTCTGTG

CCTGTGACACCCAGCTGATACCCTCTGTTACGAAGGGACACCCTTCCCCATATGTGGGAG  
TAACAGGGCACCCTCATTGGAGAACCCTGCCAGCCCACTGGCACCTGCAGAGGTTTGTCT

26508 GATGAGGAAACTGAAGCTCCTGGAGGTTAATGCCATGTATATGGTGACCCAGTGCCGGGG  
GTCTGGGGTGAGGTGAGCCCTTTGTGTCTCGTGCAGTGAAGCCCACTGGCCCCATTCTC  
TCCATGTACCCGGGAGGCTTCTCAGTCTGGCTGCTTGAGCCTACTCTTCCACCTGCAT  
CCAGTGAGTTCTGGATACTGAGCTGGCATCGGTCTCATGGAAGGCGAGTGTGGGCCTGC  
CCAAGCCATCCTCTGGCTCCACTGACTTGCTGGGAAGAGAACTGGCACCACTGTTTACA  
[T, G]  
TAGTTTCTGTGCCTGTGACACCCAGCTGATACCCTCTGTTACGAAGGGACACCCTTCCCC  
ATATGTGGGAGTAACAGGGCACCCTCATTGGAGAACCCTGCCAGCCCACTGGCACCTGCA  
GAGGTTTGTCTGAGGCAGCTGGGCACCATGGTGCAGAGCACTGGCCAGGCCCACTGGGGC  
AAGAGTTTGTAAAGGTGTTAAGATGCATGATTAACCCAGTGGTTCCCAAACCTGTCCATAC  
ATTAGAACCCTGGGGTGGCTTCAAAAATGCTGATGCCTGTGTCCACCCCCAGAGATT

26570 CTGGGGTGAGGTGAGCCCTTTGTGTCTCGTGCAGTGAAGCCCACTGGCCCCATTCTC  
CATGTACCCGGGAGGCTTCTCAGTCTGGCTGCTTGAGCCTACTCTTCCACCTGCATCC  
AGTGAGTTCTGGATACTGAGCTGGCATCGGTCTCATGGAAGGCGAGTGTGGGCCTGCC  
AAGCCATCCTCTGGCTCCACTGACTTGCTGGGAAGAGAACTGGCACCACTGTTTACATT  
AGTTTCTGTGCCTGTGACACCCAGCTGATACCCTCTGTTACGAAGGGACACCCTTCCCCA  
[T, A]  
ATGTGGGAGTAACAGGGCACCCTCATTGGAGAACCCTGCCAGCCCACTGGCACCTGCAGA  
GGTTTGTCTGAGGCAGCTGGGCACCATGGTGCAGAGCACTGGCCAGGCCCACTGGGGCAA  
GAGTTTGTAAAGGTGTTAAGATGCATGATTAACCCAGTGGTTCCCAAACCTGTCCATACAT  
TAGAACCCTGGGGTGGCTTCAAAAATGCTGATGCCTGTGTCCACCCCCAGAGATTGT  
GATTTAATTGGTTTAGGGTATGGCCTATACTCTGGATTATTTAAATGTCCCCATTGAGA

26582 TGAGCCCTTTGTGTCTCGTGCAGTGAAGCCCACTGGCCCCATTCTCCATGTCACCGGG  
AGGCTTCTCAGTCTGGCTGCTTGAGCCTACTCTTCCACCTGCATCCAGTGAGTTCTGG  
ATACTGAGCTGGCATCGGTCTCATGGAAGGCGAGTGTGGGCCTGCCAAGCCATCCTCT  
GGCTCCACTGACTTGCTGGGAAGAGAACTGGCACCACTGTTTACATTAGTTTCTGTGCC  
TGTGACACCCAGCTGATACCCTCTGTTACGAAGGGACACCCTTCCCCATATGTGGGAGTA  
[A, G]  
CAGGGCACCCCTCATTGGAGAACCCTGCCAGCCCACTGGCACCTGCAGAGGTTTGTCTGAG  
GCAGCTGGGCACCATGGTGCAGAGCACTGGCCAGGCCCACTGGGGCAAGAGTTTGTAAAG  
TGTTAAGATGCATGATTAACCCAGTGGTTCCCAAACCTGTCCATACATTAGAACCCTGG  
GGTGGCTTCAAAAATGCTGATGCCTGTGTCCACCCCCAGAGATTGTGATTTAATTGGT  
TTAGGGTATGGCCTATACTCTGGATTATTTAAATGTCCCCATTGAGAACTGCTGGGTTA

26693 GAGTTCTGGATACTGAGCTGGCATCGGTCTCATGGAAGGCGAGTGTGGGCCTGCCCAAG  
CCATCCTCTGGCTCCACTGACTTGCTGGGAAGAGAACTGGCACCACTGTTTACATTAGT  
TTCTGTGCCTGTGACACCCAGCTGATACCCTCTGTTACGAAGGGACACCCTTCCCCATAT  
GTGGGAGTAACAGGGCACCCTCATTGGAGAACCCTGCCAGCCCACTGGCACCTGCAGAGG  
TTTGTCTGAGGCAGCTGGGCACCATGGTGCAGAGCACTGGCCAGGCCCACTGGGGCAAGA  
[G, A]  
TTTGTAAAGGTGTTAAGATGCATGATTAACCCAGTGGTTCCCAAACCTGTCCATACATTAG  
AACCCTGGGGTGGCTTCAAAAATGCTGATGCCTGTGTCCACCCCCAGAGATTGTGAT  
TTAATTGGTTTAGGGTATGGCCTATACTCTGGATTATTTAAATGTCCCCATTGAGAACT  
GCTGGGTTAGCCTATGAGAGAAGTGTGGGCAAAATGCCCACTTCTGTCTCATTGTCTTT  
CTCAGCACCTACTCCTCAAGGGAATAACTGATTGAGCTGCAGGGGACAAAGCTTCCCT

26884 AGGGCACCCCTCATTGGAGAACCCTGCCAGCCCACTGGCACCTGCAGAGGTTTGTCTGAGG  
CAGCTGGGCACCATGGTGCAGAGCACTGGCCAGGCCCACTGGGGCAAGAGTTTGTAAAGGT  
GTTAAGATGCATGATTAACCCAGTGGTTCCCAAACCTGTCCATACATTAGAACCCTGGG  
GTGGCTTCAAAAATGCTGATGCCTGTGTCCACCCCCAGAGATTGTGATTTAATTGGTT  
TAGGGTATGGCCTATACTCTGGATTATTTAAATGTCCCCATTGAGAACTGCTGGGTTAG  
[C, T]  
CTATGAGAGAAGTGTGGGCAAAATGCCCACTTCTGTCTCATTGTCTTTCTCAGCACCTA  
CTCCTCAAGGGAATAACTGATTGAGGCTGCAGGGGACAAAGCTTCCCTGTGCCTTTGCC  
CAGGCACAAGGCCCTCCTGGGAGGTGTGGGTGGCTAAGGCTGGCGTGATTCTGATGTG  
GCACGTGTGGGGCAGGTATTTCTCTACTTGAGGAGTGACATTGCATGCCGTCTGCATGCT  
CCCTCATTCTTTCTCAGACAATCTTATAGGTAGCACCTTTCAATCTCCTCTTCAGACG

27320 TCCTGGGAGGTGTGGGTGGCTAAGGCTGGCGTGATTCTGTATGTGGCACGTGTGGGGCAG  
GTATTTCTCTACTTGAGGAGTGACATTGCATGCCGTCTGCATGCTCCCTCATTCTTTCT  
CACGACAATCTTATAGGTAGCACCTTTCAATCTCCTCTTCAGACGAGGAACTGAAGTTC  
ATGGTGCATCCTACGTGAGGAACAGAAAGAGGACAGGGAATAAACTGGATTTTCCTTGG  
GATTCTCAGATGGGCCAGGTCCTAAGTAAACACCAATCTAGCTCTGCTGACCACTGGGGG  
[C, T]  
CTTCTCTCCTTTTGGACTCTGTTGTAAAAGAAAATTGAAAAACGGTCTTATTGTGCCTTAA  
AGCCTTTTTTAATTAAATATAACTCATTTAATTTAACTACTTTAAGTTCATTTTTAATA  
TAAGTGTTATAGTGGTACAATGAAAGTGCCTTCTAATCAAAGTGTGTATGGGGATTTACC  
TCCCTGTACAAAAAGCCTGTGGGAGCCCCAAACCAATGATTTATTTCAGACAGCAATCCAAA  
ATCACCAGACCCTGAGTGAGGCACACATGGTGGAGGTTTCATGAGTGTGGGTAGGAGTCGG

27339 CTAAGGCTGGCGTGATTCTGTATGTGGCACGTGTGGGGCAGGTATTTCTCTACTTGAGGA  
GTGACATTGCATGCCGTCTGCATGCTCCCTCATTCTTTCTCACGACAATCTTATAGGTA  
GCACCTTTCAATCTCCTCTTCAGACGAGGAACTGAAGTTCATGGTGCATCCTACGTGAG  
GAACAGAAAGAGGACAGGGAATAAACTGGATTTTCCTTGGGATTCTCAGATGGGCCAGG  
TCCTAAGTAAACCAATCTAGCTCTGCTGACCACTGGGGGCCTTTCTTCCTTTTGACTC  
[A, T]  
GTTGTAAAAGAAAATTGAAAAACGGTCTTATTGTGCCTTAAAGCCTTTTTAATTAAATAT  
AACTCATTTAATTAACTACTTTAAGTTCATTTTTAATATAAGTGTATAGTGGTACA  
ATGAAAGTGCCTTCTAATCAAAGTGTGTATGGGGATTTACCTCCCTGTACAAAAAGCCTG  
TGGGAGCCCCAAACCAATGATTTATTTCAGACAGCAATCCAAAATCACCAGACCCTGAGTGA  
GGCACACATGGTGGAGGTTTCATGAGTGTGGGTAGGAGTCGGAAGTTCCTCTGGGGGCTGT

27542 AAACTGGATTTTCCTTGGGATTCTCAGATGGGCCAGGTCCTAAGTAAACACCAATCTAGC  
TCTGCTGACCACTGGGGGCCTTTCTTCCTTTTGACTCTGTTGTAAAAGAAAATTGAAAAA  
CGGTCTTATTGTGCCTTAAAGCCTTTTTAATTAAATATAACTCATTTAATTAACTACT  
TTAAGTTCATTTTTAATATAAGTGTATAGTGGTACAATGAAAGTGCCTTCTAATCAA  
GTGTGTATGGGGATTTACCTCCCTGTACAAAAGCCTGTGGGAGCCCCAAACCAATGATTT  
[G, A]  
TTCAGACAGCAATCCAAAATCACCAGACCCTGAGTGAGGCACACATGGTGGAGGTTTCATG  
AGTGTGGGTAGGAGTCGGAAGTTCCTCTGGGGGCTGTGCAGATTGAAGGAGCGGGGTGTG  
GAGAGGGCTTAGCATGGAGCCTGGCGTGGGTAATTGCTTAGTAAATGGAAGCTGCTACTG  
GGATGCTACTGCCATCCCTAGGACCTCCGCTGCTTCCCTGCTAGTTCTTACTGCTGGTG  
CCACAGCTACAAAGTAGGAGATGACAGTGAAGAGAGAGGCTCCCCTGGTGGGCAGGAGG

28586 TTGCAAGCTAGGACCTGATGGGAAGGCATCCACAAAGCTGAGCCACAGAGGCTGTGAGGG  
ATGGGAGTGGAAGTGAAGAGGGGCCAGAGGAGATGCTCAGGAGGACAGAGGGAACACTAG  
CTAGCAGGAAGATCCAAGGGGAGGGGACCTATTGCTGTGTGATGACAGTTTCTGGTTG  
GAAGTCTTGGATTAAGGGATCTTCAAGTGTCCCTTTGGAGAAGAGGGTGTGCCTGACCTT  
AAGCACTGGCCACTTTGGGTGTTTTTCAGCTTATCCCAATCAGACGCCACTTGCACCCAGT  
[A, C]  
CTGCCCCCAGCCGGCCCTTTCCAGCTTGCTCACCTTCTCAGAGGCTCCAGCCTGATCAA  
TCACCGCTGGCCCCACCATGACTCTGGCACATTTTGCATCTTTATGTGACACCGTCTGTA  
TCTGTGACTCCCTAATTCTGTGCAAAACAAGAATGAAAAATAGACTCAGACATGAGGAC  
TGTAAGTGGAGGGCACACTTTCTTCCTTTTTTGTCTTTTAAATTTTCTAGGCACAGGTTATT  
CTAAACCTCATCTTGGGCTTGCAGTTGGCAGAAAGAAAAGTAGCAGATTGGAATATCATG

28591 AGCTAGGACCTGATGGGAAGGCATCCACAAAGCTGAGCCACAGAGGCTGTGAGGGATGGG  
AGTGGAAGTGAAGAGGGGCCAGAGGAGATGCTCAGGAGGACAGAGGGAACACTAGCTAGC  
AGGAAGATCCAAGGGGAGGGGACCTATTGCTGTGTGATGACAGTTTCTGGTTGGAAGT  
CTTGGATTAAAGGGATCTTCAAGTGTCCCTTTGGAGAAGAGGGTGTGCCTGACCTTAAGCA  
CTGGCCACTTTGGGTGTTTTTCAGCTTATCCCAATCAGACGCCACTTGCACCCAGTCTGC  
[C, T]  
CCCAGCCGGCCCTTTCCAGCTTGCTCACCTTCTCAGAGGCTCCAGCCTGATCAATCACC  
GCTGGCCCCACCATGACTCTGGCACATTTTGCATCTTTATGTGACACCGTCTGTATCTGT  
GACTCCCTAATTCTGTGCAAAACAAGAATGAAAAATAGACTCAGACATGAGGACTGTAC  
TGGAGGGCACACTTTCTTCCTTTTTTGTCTTTTAAATTTTCTAGGCACAGGTTATTCTAAA  
CCTCATCTTGGGCTTGCAGTTGGCAGAAAGAAAAGTAGCAGATTGGAATATCATGTTAAA

28599 CCTGATGGGAAGGCATCCACAAAGCTGAGCCACAGAGGCTGTGAGGGATGGGAGTGAAG  
TGAAGAGGGGCCAGAGGAGATGCTCAGGAGGACAGAGGGAACACTAGCTAGCAGGAAGAT  
CCAAGGGGAGGGGACCTATTGCTGTGTGATGACAGTTTCTGGTTGGAAGTCTTGGATT

AAGGGATCTTCAAGTGTCCTTTGGAGAAGAGGGTGTGCCTGACCTTAAGCACTGGCCAC  
 TTTGGGTGTTTTTCAGCTTATCCCAATCAGACGCCACTTGCACCCAGTCCTGCCCCAGCC  
 [G, A]  
 GCCCTTTCCCAGCTTGCTCACCTTCTCAGAGGCTCCAGCCTGATCAATCACCGCTGGCCC  
 CACCATGACTCTGGCACATTTTGCATCTTTATGTACAGCCGTCTGTATCTGTGACTCCCT  
 AATTCTGTGCAAAACAAAGAATGAAAAATAGACTCAGACATGAGGACTGTACTGGAGGGC  
 ACACCTTTCTCTCTTTTGTCTTTTAATTTCTAGGCACAGGTTATTCTAAACCTCATCT  
 TGGGCTTGCAAGTTGGCAGAAAGAAAAGTAGCAGATTGGAATATCATGTTAAACAGGTGGA  
 30857 ATAGGCAATAGAGGGGACATCGAGCTTGCTTGCTGTGCTATCTCTGTTTCAGCCCCAAAG  
 TGCTGGAGACTTGCACTGTTTTGTTGTTTGTGTTTGTGTTTGTGAGACAGAGTCTTACGC  
 TATCACCCAGGTTGGAGTGCAGTGGCGCTCCATTGCAGCCTCTACCTCCCTGGGCTCAGG  
 TGATCCTCCCACCTCAGCCTCACAGTATCTGGGACTACAGGTAGGCACCACCATGCCCCA  
 GCTAATTTTCATATTTTTTTGTAGAGAGGGGGTTTCACTATGTTGCCAGGCTGGTCTC  
 [A, G]  
 AACTCGTGGGCTCAAAGGAGACTTGACACATTCTTGCCTATATGGCCATGCCAGCCCTC  
 TCCCCTTACATCTGGTCTTCTGGGAAGATGAGAAAGGCAAGCTCAGCCTCTGCTGATTG  
 GGCAACTCTTAGGCAGGGCTGGCTGAAAGGTGCAGGACCCCTGGCCTTTATCAAACCTCC  
 CTCAGCTATCTAAGCCCTAAAGGTTTAGTGTGGCAGCTGTGCCTCCCCACCTTTGAC  
 GTTCTTTAAGGCAGTAAGCCCATCTACCAGGGCTACACACACCTCTCTCTAACCCAGA  
 31503 CCTCGATTAAGTGGCATTCTCTCAAGAGCCAGCACCCCTTCGGTGTTTTTTCATGAGCACTT  
 GCAGCAAGCTCTGCATAACTGGAGGAAGCAGGGGGTGTGTTAGACCTCCCCAGAATATC  
 CTGTTCTTTGCTGGATTATTCAGCTTGGCTTTCAAACCTAGCCCCGGGTTTAGGGTTAATT  
 CTCTCACCTTCTCTGGCTTTGAAGACCCAGACATGGTGTGCTGAGAAATCCAACAACCTCA  
 ATAGTTTTCTCTGCCTTTAACTCAGCCATATAAATGAGATAAAGTGTGCAAACTCTT  
 [A, T]  
 CTGTGTGCACAGTAAGTGGGAGCCAGCAGTGAATACATGCTACATAAGGCGCCACTTTA  
 TTTAGCTGTATTTTGTCACTCAAGTGAAGATTTTAATTGCAGAATAGTGTCTTGCTAGC  
 AAAAATGAACCTGCTTAGAGTCAAGTTTTTAAATTAAGTGAATAAATGAAAAATTGTA  
 AGAAAGATTGTTAAAGAAGCATTCATTTTAAGAACATCTCAGATATGAAAACTTAGAAC  
 TTAGATGTCAGAATTTCACTAGCGATGAATCCCATGGCAAAGCTTCCATCTCATCTGTAC  
 33107 TGCAGAAAATAATTTCTTCTTAGACAATGCATCCAGGGCCTTGGTGTCTATTATGTCAAT  
 GAATTTTCACTCCTTACATTTCTGCTACAGCTTTTGAGGGGTGCTTTTTTAAAGCACTGGA  
 AAGATGGATTCTTATTTAGCCTCAATAATTGAGGAAGCCGTTGAACTCATTACCTCCCA  
 AAAATAATCTGATCGTCTCCCTCTCTTAGCTCTTTTATGAATGGTAATGTTGTTGATGA  
 TGGTGGCACATGTTGGAGGACTGCCTGTGTGCTGGACACCATGCTAAGCATGGGACAAGC  
 [T, -]  
 TATTATTATTTTCAATTTGATCATCACAACCTACTCTATGTGGAATGTGCTATTTCTGCCTTT  
 ACAGATCAACAAACAGAGACTAAGGAAATGTTAAATAATTCAACAAAGGTGACAGAGGCA  
 CAGCTGGCCCCCACTCTTAATCCCTGTCAATTTTTTACGAATGTGTGTTGAGCATTTC  
 TTGGAGGAAGTAGAGTATAGTGGTAGGACCTCAGAGGTTTGAAGTCTAGTCTGATGTGGC  
 CACTTCTCATGTGAAATTCAGCAAGTTGCAGTCTTCCCTCAGTACATCTTCTTCATCT  
 33671 AGTTGCAGTCTTTCCCTCAGTACATCTTTCTTCATCTGTAAATTAAGTGGGGTTTGT  
 CCCTCTATTTAACAACCTTCTGATTACTCCTGGGTAATTGTCTTATTTTAAAAATTTT  
 ACTGGAGCATATCAAATATATAGTAAAGACACATATTCTGAGTGTAGCACTTGGTTAATA  
 TTTTGTAAAGTGAACATATCTATGTGACCACCACCAAGATGATAATATAGAACATTTCCAG  
 CATCCACAAACCATTTCTGTGTCCCCCGTCATTATCCTCGCAAAGTTACTACTCATCT  
 [A, G]  
 TCATCAGAGATTGGTTTTGCTTGTCTTCTGAGATTTATAAAAAATAAAATCTTATAAACTGT  
 ACTATTTGTTTCTGCTTTCTTTCCCTCAGCGCTATGACAATGAGATTGAGTACATTATC  
 ACATGTTGCAGAGTTTTTCTTTTGCAGTGCAGTGAAGTTTTCCATTGTATGGATATGCC  
 ACAGTTTATCTGTTCCACCATTTGGTGGACATTTGCATTACATATCATGCTGCATTACGCC  
 TTCTTATACATGCATTTTGGTGTCTACATGAATGTACTTCTGTTGGACATTTACTTAGGA  
 35045 CTCAGCATACGGCCAATTTTTATAAATCTCGAATGGACACTTGAAATGAAGTGCTATTTG  
 GTACAGTGTGTTGATGTCTGTCAATTAGGTCAAGTTTTAAAAATTATAGTGTCAACTCTTC  
 TATATCCTTACTGATGCTTTTTTCTCTACTTGTCTATCAGTTAAAGACAGAGATTTTT  
 TAAATTTTCCAACCATTATTGTGGGTTAAAAAATTCTCCTCTTAGTCTTTGAGTTCTG  
 GCTTTGCATATATTTAGACTATGCTACTAGGTATGTACAAGTTTGAATTGCTATATATT  
 [C, T]

CTGTTAAGTTGTTTCCTTTTCTAATTATGAACCATCCCTTTTTATCACTGATAATAATTCT  
 TGCCTACTTTATCTATAGCCATGTTTTCTGGTTGAAGTTAATATGGTTTATCATTTAAA  
 TTCTTTACATTACAGCCTTTTGTAAACATATATTTATGATATGTCTCTTGTAGGCAGCAT  
 ATAGTTGGATATTGTTTTCTCTATTATGCCAATCCTTGTGTGTTTTATTTTTATTTATT  
 TTTTTGTTTTGTTTTGTTTTGTTTTTTTTGAGACAGAGCCTTACTCTGTCTCCAGGC

35944 ATAGGTTTAAATATAAAACCCATGTTTTCTCTGTCTATATTCCTTTTCTCTTCTGCTTT  
 CATGTCTTCTTTTGGATGAGACAGTTTTGGTTACTTCATTCCCTTGGTGTATAGCACTA  
 ATTTTGCCATTTTGGGACAGTACTAGGACATTATAACACTTTAATCTCATTTGACCTCC  
 TGATCTTTTTTAAAAAATCATATTACTATGTATTTTAGTTCTACAAATATTTTTATCTT  
 ACAGTGCATTATTGTTGTGTTAAGTAGCCGAAATGTATTTTTATGGTTTTTTTAAATGCTT  
 [G, T]  
 TTGGTGTCTATTATTTCTTCTTGCATAGCTATACATTCTGAATAATTTTCTGCGTTT  
 TTGCCTTAAAGTTTCGCTATAAAGTATTGCTCTTAGTGTTAATTTGTTGGCAATGTATTC  
 TCTCAGGGTTTTTTTGTCTAAATATCTGTATTTACCTTCATTTATTTTACCTTATGAAT  
 ACCCATATTTTCATTGGATTCTAATGTTTTTTTCAAATTTTAAAGATGGTGGGTACTATG  
 CTTATTACCTGGGTGAGCTTTACACCAAATCCCCAAGACATGCAGTTTACCTGTATAGCA

37157 TTGTTTATTTTTGTTTCAATAGGTTTTTGGAGAACAGGTGGTGGTTTGGTTACAGGTTTTT  
 AGTGGTGATTTCCGAGATTTTGGTGCATCCATCACCTGAGCATTTTACAGTGTACCCAAT  
 GTGTAGTCTTTTATTCGATTCTAGTTTTATAATGAAATTCAGCATCTTTTCTCCTATTTT  
 CCTAAACATATTAGCCATAGTTATTCTAAAGCTTGTGCCTAAGAATTCTAAGATCTGGAT  
 AACATGTGGCTCTGTTTCTGTGGTCTGTTTTCTTGGATTTTAGCCATTCTGATCCCATTTC  
 [G, A]  
 TGCTATGCCTGGTAATTTTAGACTGGATGCTGGAGATTATATATGAAAAATTGTAAGCC  
 TGTGGATCACTTTATAGATTCCACAGAGGATTTATTTTTCTTGTAGACAGATAGAGT  
 CCTGGAATATCATCTTTATCTACTCAAGAATAGGAATAATTTGAGAATATATGGTCTTAG  
 CAGTAAGTCTGCTGCATTTGTGAGGGCGACTATTTCTTGGAAAGCCTAATTTTTGTCTCT  
 TTAGTACCATGTACTTTCAAATCTATACCTAGATTTTATTATTTGAGGCTTTTTTTTTT

37603 AAGAATAGGAATAATTTGAGAATATATGGTCTTAGCAGTAAGTCTGCTGCATTTGTCAGG  
 GCGACTATTTCTTGGAAAGCCTAATTTTTGTCTCTTTAGTACCATGTACTTTCAAATCT  
 ATACTTAGATTTTATTATTTGAGGCTTTTTTTTTTCTTGTTCAGGCTACTTTTAACTT  
 GTTTCTCAGCCTTTTGCCTTTATGTGTGTAGCTCAGGCATAATCATATACTCAAGGGG  
 AAGCCGAAAATGTTGAGCTCACTTCTTTCTGGTTTCTTTCCAGGGTTTCTGACCCTCA  
 [A, T]  
 TTTCTGGCTTCTTTGGTAGCCTTGCACTCTGATGTTTATTTCCCATCTCAGAGAGACTTC  
 TCTAAGTTCTAGAATATTATTTCTGTTTGGCTTCTATGCAAAACAGCAAATGTGCAAA  
 GGGGAAATGTGGCAGTGAATATGGGGCTCATCTCAATGGACTTTTCTCTATAACTTTCC  
 TTTAAATCTGGCTGCTTTTGTGTGCTGTTGGATGCCTTCAAAAATTTTTTTTAAATCCA  
 CTTTTATAATTGTTGATAGCAGAAGGATTAGTCTCATACAAGCTACTTTTTTATGGCACA

39242 TTTTTATTCAACAAATATGTATTGAGCATCTGTTCTGCTACAGCACTGATGATGCAAGA  
 GTGAAAAAGATACTGGCGCCATCCCAACCCACATTCCACTAGAGGGAACAGTCAATAAA  
 CAAATGAGTAAAGGAACAGCTGTTTTTCAACTAGCACATACATTTATTTTTTAAACTCA  
 GTAAATGTATATTGGTTTCATTAATATAATAAACATATCTCAGGCTAAAAGCCAGCCTG  
 TCACTTAATGGGGAATGCTAAAGTTTTCTTCTGAAAGCAAAGCCAAGACAAGGGTGC  
 [C, G]  
 CAGTATGAACACAACGCCTAACATGGGTTGAGAATTGGTTAAAGCTCTAAGGCAAGAGAA  
 AACACCTGGAAGTATAGGAATTGGAAGAAGAGATAAGATAATTGCTGTTTGCAAATTAC  
 ATAAATACTCAAATGGAAACCCCAAAAGAATCAATGGAAAACCTATTACAAACAGTAAAA  
 TTTAACCAGAAGCTGGTTATAAAATAAATAAATAAATAAATTTTTTAAATTTGCCATCAAAT  
 ATACAAACAAAATCAGCTGGAAGAAATAATAAGAGAACATCCCATTTATGATAACAAAA

39404 ATTTATTTTTTAAACTCAGTAAATGTATATTGGTTTCATTAATATAATAAACATATCTC  
 AGGCTAAAAGCCAGCCTGTCACTTAATGGGGAAATGCTAAAGTTTTTCTTCTGAAAGCAA  
 AAGCCAAGACAAGGGTGGCCAGTATGAACACAACGCCTAACATGGGTTGAGAATTGGTTA  
 AAGCTTAAGGCAAGAGAAAACACCTGGAAGTATAGGAATTGGAAGAAGAGATAAGATA  
 ATTGCTGTTTGCAAATTACATAAATACTCAAATGGAAACCCCAAAAGAATCAATGGAAAA  
 [A, C]  
 CTATTACAAACAGTAAATTTAACCAGAAGCTGGTTATAAAATAAATAAATAAATAAATATT  
 TTTAAATTGCCATCAAATATACAAACAAAATCAGCTGGAAGAAATAATAAGAGAACATC  
 CCATTTATGATAACAAAAGACATACAAAAAGAAATATTCAAATACGCACAAGGAAAAAC

TATAAAATACTCTTGAAAGAAGCAAAAGTAGACTCAAACAATTATTAATAATCCTGTGTTA  
TTAGATAAGAACATGCAACATTATATAGATGTCAGCTTTCCCTAAATTAATTTATAAATT

40395 TTTTCATCTCTAATATTGCCTCCCCCTTCTGACAAGAGGATGCTAGACAAGAATGCTAAGG  
TGTGAAAGACAATGCTATTACCTTAAAAAGCACTGTTGCTGAATTACCTTCTTGGCTGCG  
GTGTTGAGGTGGTAGTCCCAGTTTGGTGTCTTCTCTCTTTAGTTGCTAGTATGG  
ACTTTCAGCTTATTTTAACTTAGGCTTTTATCCAAAACATGTCGTTTATGATGAATT  
GGAGATACTTTATATTAGTTATGAACTGCAATATGCATTTCTAGTCTTTCCCCCATT  
[C, G]  
TTCTCACCAGGACTTTTCATTCTTCTAGAGCTACCCTGAATTTTCATACCACCCAACATT  
TTCCTATGCTATTCTCTCTTCTGGTCCACCCTCCCTCCCCATTTTGTCTGAAAATCT  
GCTGTTTCTTCACTGCTATTTTCAAAGTTCTTTTAAAAACACTTTTCTTATGTTTCCA  
ACTGGAATGTGAAATGCTGGTATTTACAAGACAAATCACCCTTTCATTTCTCAGTAATTT  
GTGTTTGTCTGTGGCCCCAATCAACTGTGAATATCAATGCAGGTACTCAGTTTACC

42294 CTAGTCTCTAATAAGGGATGCCTTTTGTATGATTTGTGGAATCATTAAACATCATCTTTT  
TATTACATGGATAGAATGATGAGATCAGAAACGAAAATGAGTTCCTGGTCTAGAATGTGG  
CTTTGGTTTACCCTTCACCACATCCTTCTCTGTGGTACTGTCTCCAAAGAGGGAGACAA  
TCTAAAAGAAATAGCAAAATTTCTATATTGACTACTAAATCTAACATTGCTTTGCCTCCTG  
ATTAGTTCTTGTGTTATGCAACACAGCAAAAGACATAGAATGGCTATGTTATCAACATGC  
[G, T]  
TTGATACATGGATATTCATGCCTGGGACCTTGGTAACACAACTTTTCACACTATATTGA  
GTCCAGCTGGTAGTGTGCTGTCTCCATGGTGTGGATCCCTAGGGTCTAGGATCTGGA  
TAATCTGACTCTAAGATGAACCTTCTGGCTTACATTCCCATTTGCCATTATCTTCGGCTT  
CGGACTCGATGTCTCTGAACATATAGGACAATATGTAAAGCAAATGCATTGTTTGAATA  
TCAAACCAAAATGGATGAAGGTTGATGGAGCTGGGAAGGAGGTTTCTTATGAAAGTAGT

43354 TCCTATTGTGCACTGATGCTTTTCTTGCTTGTCTGTCAAAGTTGAATGTTTGAGAGTT  
CCTGAAATAGCCCAGTGTGTAACGTCAATGCTTACAACCTGGCAGGAAGAAAAGGAGTG  
GGACCTTGCCGGCTGGTTCTAAGTATTTTAGGTCTGGGAATTCAGTCACTGACTGACTT  
GGGTTTGGGGTTGTTAATCTTCTCCAGAACAGTGTACAAGTATAAAAAGAATAGAAGCA  
CTATGGTGCTTCAGTAACTATTTTCTGTCAAAGAAAAGTAAGATATTGTCTAGCAATG  
[A, G]  
ACACCTGGGTTGGTTCAGCTCTGACTCGACCCGGACTGAAAGAGGAACAGATGAGTA  
ATAGCTGATTTTCTGCACAGCTTACAAGGCCAGGAGAGTCTAGAAAGTCTTCAGGTCT  
AGAGAGGAAGCTCCCAGTCACAGAACCTGAGGAGGTTTCTGTTTTGATTTGCCTTATTT  
CAATACTGTACCTGACTCAGGAGCATCCCCCTCCATTGAAGGTTTAGGGCCACAAATGGCT  
AACCAACTGCAACTTCACATTATGTGACTTTTGGAACTCTTGACTAAGTATGTGTGTTG

43522 ACTCACTGACTTGGGTTGTGGGTTGTAAATCTTCTCCAGAACAGTGTACAAGTATAAAA  
AGAATAGAAGCACTATGGTGCTTCACTAACTATTTTCTGTCAAAGAAAAGTAAGATAT  
TGTCTAGCAATGAACACTGGGTTGGTTCAGCTCTGACTCGACCCGGACTGAAAGAG  
GAACAGATGAGTAATAGCTGATTTTCTGCACAGCTTACAAGGCCAGGAGAGTCTAGAA  
AGTCTTCAGGTCTAGAGAGGAAGCTCCAGTCACAGAACCTGAGGAGGTTTCTGTTTTG  
[A, G]  
TTTGCCCTATTTTCAATACTGTACCTGACTCAGGAGCATCCCCCTCCATTGAAGGTTTAGGG  
CCACAAATGGCTAACCAACTGCAACTTCACATTATGTGACTTTTGGAACTCTTGACTAA  
GTATGTGTGTTGAGAAGTGAGAGGGGCTAATGTTAGCAGTGGAATCGAGTCCAAGCCAA  
ATCATAGTGGGAACTAGCGACAGTAGGGGCAAAGTGAATGCATTGTGTGCCTTAAACCTG  
TCCTCTGCCCTATTTCCCCCTCTTCCCCCTCCAGCCGTAGATGTCATGCAGTCTAGCTTTC

44875 GGAGAAAATCCATTTCTCTGTTTTTAAAGTCACTTAGTTTGTGGTTTTATTATGGTGGCCCT  
AGGACAGTAATACACTTGGAAAATGTTGGACTCAGTAACTTTAGTTTTTATTGTTGTTG  
ATGATGATGATATTTTACTGGAGAATCTCTCATGATTTTTCATAGACAAAATGTCACCTC  
TCAACAGGGAATGTAATATGCAGCATTTTCCAACTTGGTTTTCTGTGGGATTTAACAAA  
ATTAATTGTGTTGTTTTTAACCATCTCAGGGCAGGCATTCCATGCAGTGCCTTTTGCAAAA  
[C, A]  
CCTGCCCTAGAGAGCCAGGAAGAGGCAGAGCTTCTCAGAGTGCCAGGCACCAGACTG  
TGCTCCATGGGCTGTGCATGTACAGAACAGTGTGACAGCAATAATAAGAATATCTTCTTG  
GTTGTTCTGATGTTTTTCAAGAAATGTTACGTTCTTTACCTCCCTTTCCCTTGAGTAACC  
TGTGACACAGAGCAGATAGCACTGCACACATGAGACTCCTTCTTTCATGTTAATTTTT  
AGTAGGGATGAGGAATGCTTCTGGGCTGGTGCCTCTCTGATGCCCTGAACCTCTCTTAG



45677 AAGGGTGCATGCCTCCCCAAGGGAGACAGAGCCATTCTCTTCAGGACAGTTCCGTATG  
ACCCTGGATATTCATGCCTGGGACCTCCCTATATGAGCTGCATGGGAAAGAGTGATGGCT  
GCATCTCTCTGTGCTTTCCAGTGCAGGTATTTTATAACTCCCTCCAGACATCTAAAATT  
TAATTTACCCCTTTCTGAAGCTTCAGCAAAAGGTGCCACCCCTACCTTTCTAAGATACT  
CCCGTGTCCTGTGAGGGCCAATGCTGATTGCGACTGCCAAAATTCATCTACTCAAACC  
[A, G]  
GTACTTTTCTCTGACTGTTCCCATCATGTTGAATTACAGCCATGAGCGAACACTTGAGTA  
AGCTGAGCAAAATGGCTGGGATAATTAGCCCTTGTGAGCCATCTCTGAGGAGCATAGGGC  
GATCTGTAAGCTATTCCAGATGTCCGTGATTGTGCTGTGATTAGGGGCTGCGAGTTTGGG  
GATGAGCACC AATGTCATGTTGCATTGCCACCTCCCAGCGCTGGCTCCCGCACATGTTG  
CAGCCCTGTCCAGCCTGGCTGGCTTCTAGCAAGGCTGTGAGGGAACCCGGGAGAGGAGG

46024 CGAACACTTGAGTAAGCTGAGCAAAATGGCTGGGATAATTAGCCCTTGTGAGCCATCTCT  
GAGGAGCATAGGGCGATCTGTAAGCTATTCCAGATGTCCGTGATTGTGCTGTGATTAGGG  
GCTGCGAGTTTGGGGATGAGCACC AATGTCATGTTGCATTGCCACCTCCCAGCGCTGGC  
TCCCGCACATGTTCCAGCCCTGTCCAGCCTGGCTTCTAGCAAGGCTGTGAGGGAA  
CCCGGAGAGGAGGGCTGCTGCTGTCTTCAGGGAAGGAAAAAGGGGTGACCATCAC  
[A, G]  
TGCACACTCAGCATGGCTCTGGCTCCTTTGCAGTGCAGATCTCCTAAGCAAACATGACCT  
GCCAGTCCCAGTGTGAACTAGAGCCTCACTTTCTGAAAACCCGTGGAATCGGTCCCTA  
ATTGGCAGCTGCCTCCAATAGCCCTTTTATAGTTCTCTGCATCTGGGTGAACCTCAGCTA  
TCAAGAAC TGCATTCTGTTTACCATTAAATTTGATTTTGTGTAGCAGATGTTTCTGGAT  
CTCTCAGTTCCCTGCCTAATCTATCTTGGTATAATGTGAAGTGGCTGACTGCTTCAATG

49591 CAAACCTCATTAAGCTATTTGCCCCAGCATATTAATGTGCTATCCACCAGCCTCTGGGGT  
TAATTATCTGTGAGTTAAATCATTTGTTTCTGTCTCTTTATCTCATTGCTGCTTGGCA  
ATCTTTCTTTATTAGGAAACGAAGTACAGGATGCAACTGACCATTATGTTCTAATTCTAT  
TCTTTTCATCAAAATGAGTTCATCTTTTAAAGCTCTTTTGTAAAAACAACAACTGTCT  
TTTTTCATTATTTTAAGATTGTGTTGTTTTTTTAACAAATCTTTAATCTCTCTGCTTCAGC  
[C, T]  
GGAGCAGAGCCAGGACTGGAAATAATCTGTAAGGGGAGACCTCTCCTCTAAATCAGCAAG  
ACCTGCCAACACTCTCTCTCCTGATTGGCCTCACTCACTCTGCATTTGGCCATTTCTCT  
CCTGTGGCTGTGGTGAGGGCTTCCAAGGTGTACAAGTTGGGCTTGGTGAATAAGCCACAG  
TGTCTTGGCAGATCAGGCAACCAGGGTTGGAAAATCCTGTGCATTCTAACACACCCCACT  
GGTCTCTACATGCTCTTATTTGGGTTATATTTCTTGGCCAAGGTTGCCATTGGGTTCCAA

49822 AAACCTGTCTTTTCATTATTTTAAGATTGTGTTGTTTTTTTAACAAATCTTTAATCTCTC  
TGCTTCAGCCGGAGCAGAGCCAGGACTGGAAATAATCTGTAAGGGGAGACCTCTCCTCTA  
AATCAGCAAGACCTGCCAACACTCTCTCTCCTGATTGGCCTCACTCACTCTGCATTTGGC  
CCATTTCTCTCCTGTGGCTGTGGTGAGGGCTTCCAAGGTGTACAAGTTGGGCTTGGTGAA  
TAAGCCACAGTGTCTTGGCAGATCAGGCAACCAGGGTTGGAAAATCCTGTGCATTCTAAC  
[A, G]  
CACCCCACTGGTCTCTACATGCTCTTATTTGGGTTATATTTCTTGGCCAAGGTTGCCATT  
GGGTTCCAAGAAATGCGTCAGGGCCTGCATTAAAAAGAAAAAAAAAAAAACAAAAACCTTTT  
CACAAAATGTTGAATGTTGCTTTGAACTCTCCAGGAAGTCAGGGAGCGTGTGTCCAGAA  
ATGAGCAGGTAGGATGGGCACTGGCTCCATGGAGACAGTGACCCACAGCCTTCCGGGATA  
AGAGTGCAGCCAATAGTGGGAGACCTGGGCCGGGTCTGAGCGCAGTCAGTGCAGTTGG

50057 GTGAATAAGCCACAGTGTCTTGGCAGATCAGGCAACCAGGGTTGGAAAATCCTGTGCATT  
CTAACACACCCCACTGGTCTCTACATGCTCTTATTTGGGTTATATTTCTTGGCCAAGGTT  
GCCATTGGGTTCCAAGAAATGCGTCAGGGCCTGCATTAAAAAGAAAAAAAAAAAAACAAAA  
CCTTTTCACAAAAATGTTGAATGTTGCTTTGAACTCTCCAGGAAGTCAGGGAGCGTGTGTG  
CCAGAAAATGAGCAGGTAGGATGGGCACTGGCTCCATGGAGACAGTGACCCACAGCCTTCC  
[G, A]  
GGATAAGAGTGCAGCCAATAGTGGGAGACCTGGGCCGGGTCTGAGCGCAGTCAGTGCA  
GTTGGATGGTGCACAGAGCTGGTCTCCCATGTACTGCAAGCCAGTGATTGCCCCATCCC  
TGTTCTTCGGGGCTCCAGCTTCTCAGCTCCATTCTCTGCCCCCTCAATGGCTCTCTCACCT  
CATCAGTGCCTCAAAAACAATATCTGGGACTCTAGTTTGATAACTACTACTTGCAATTGGA  
GAAATGACTCCTCTGGAAAGGTGAATACGATTCTCAGAGTTTGTGAGGTTTTATTGGTT

50523 ATGGCTCTCTCACCTCATCAGTGCCTCAAAAACAATATCTGGGACTCTAGTTTGATAACT  
ACTACTTGCATTGGAGAAATGACTCCTCTGGAAAGGTGAATACGATTCTCAGAGTTTGT  
GAGGTTTTATTGGTTGCTTATAGAAGTTTCTTGGGCTGATTGGAGTTTGGTGTGCAGAG

ATGACCCGGCATAGTCCCTGCCCTTATAGATGAGTCAGTTGAGAAGATGCCCAAGCGTCC  
 TGCAGACAGATGTCTACCTGGTGTACCTGCACCATGGCCAGCCACCTCTCAGTTGGGTCC  
 [G, A]  
 CAACATAGAGAGAGCATTGTTTCTAGTGTAAATTGATGTTGGAATCTGGGAGAACAACCTCTC  
 TGAATGTTCTGGTGGAGGTGAAGTTTCAGGATCTTTTTTCCAAAGCATGGCTGTCTCAGC  
 AGAGGGTCCCCCTTGACTTTTAAGGGCACACTGTACCAGTGGTGACGTTTTTGTGCAAA  
 TAACAAACCCCAACCAACTAGCTCAAACAAAAAGAGGACTTATGGCTTATGTAATTGGA  
 TAGTCCAGTGAGGTGGAAGGTGAGGAGTGCTGGGCTTCAGATATACTTGATATGGAGTG  
 51537 GCCTGAAAAGCAGGCTAAGAATCAGCAAACATTACCTAGCGTTTCAGGGGGGAGGTGCT  
 CTCTTCTGTCTTCAGAAGGAATCCAAGGCTAAGAGATTAAGCAGTTGACCCAAGGTACACA  
 GAAGCTTCTAACAGAGTGTGAGTTTGAACCTCAAGTCCCTGATGACAAATAAAGGGCACTT  
 TTTTGTGTTTCAAATCACAGCTGCCTCCAGCGATTGGGTTCTTTCACCTTGTCTTTTG  
 CCTGTCCCCCTAGGGTAGCTGCAGGAGGTACCTGGGGAGGTGCATCAAGCATTACCAGC  
 [C, T]  
 GAAACTTGAGAGGGGTTTTACCCCAACATGACATCCTTTCTTTAGCACTTTAGCCAAAG  
 CACATAAGGATGAAAAGCAAATGAACATCAAATGATGAAATCACCCAAAATAGAGAGAAA  
 AGTGAATGAGCAAGCCCCCTCACCTGGCAGTGGCTTCAGTCCTTTCCTTGATGATGTTTGT  
 CAGAAGCTTTTATTTTCCACTTTTCTTAAGAGATCACCTTCTTCTTGGGAAGGGGTTGG  
 TGGAGGCTCGCTGGGCTGGCTGCTTCTAAATGGGCATGGGGTGGCAGACAGGAACACAGG  
 52702 ATAATGTTTGTGTAATTCTGATTGAAATATTCGTATTCAAAAATGTGGATTCAATTGTTCT  
 ACAGTCAGCATGCCTGCAGAGTCAGAGGTCTGGGACCTCCCCAACCTCCCATCTCGGG  
 GAGCTGTGTCTTGCTGCTGTACCAAAGGGGAGTAGAGAACCCCAACTTCAGAAGAAATA  
 GGCCTGTAAAAACCCACGGGTCTGGGCAATGCGTTGTGGGGGTAAAAATATATTTTCAG  
 TCTATTGCTTTACTAATTTTAGCAGTTATTGCTCTCCCTTTTGTGCTGGAAGCAACATT  
 [C, -]  
 CCATCCAGCTGCTTGGCTGCTTCATTTGAATTTTTATCATTGTTGTGAGCCCCCTGCATGT  
 TTGGACACAAAATGGGAGTCTGTGGCTCAGAGGGGACCTTGATTGATAGGGTCAGATC  
 TAATCTCCTGCTCAGAACTTCAGCGGAAAAATAAATGAGTTGAGGTTTCTGTTTTGTGT  
 GTGTGTGTTTATTTTTTAAAAACAGTAGGCCTGTAAAGCTGTGCTGGCATATTACTTTTT  
 TCCCCTTTATACAGAATTTAAATAATACCTTACATTCAAATAGTGTAAACGGGTGTGCCT  
 53996 GCAGCGCGGTTTGATTCTCGTACCGCATCGCAGATGCTAAACTCCCCCATGCTCTCTCCA  
 ATCCAAACCTCTCACTGGTCTTCTGCAGAAATTTCTAATGAACAAGATAATTCATTGTGAG  
 TGTGCTTTGAAATGAATGAATGAATGCTATTAAACTACAAGGTGACAGATATTTCCATGT  
 GCCTCTTAGGAAATTGCATGCCTTTCCAAGAAGACAAGGTTGAAAAGCAGCTTGTGTTG  
 TTGAATAAGCTCAGCACTGTCTGTCTGTTTAGGAAAAATAAATAATTGTTTCTTGCCCA  
 [T, C]  
 GAGAATTCTGGAAGTGGAGCTGTCCAGAGCTGACCCGTCTGTCCACATTTCAAATTTTAC  
 TTTGGAGAGTCTGGGAGAGGGAGCAGATGAAGCCATTTAGAAATGTAAATGCTGTTTG  
 ACATCTATTAGCTCAATGCTCATCCATTGCTGACAGCAGGATCCATTAGGACGCGAGTGT  
 CATGGATCAGAGACATTTGAAATATAGCGAGAAACATGCTACCCGACAGCAGAGGCCCATG  
 TAGATGACTTGAGAGAGCACTAGATGTGCCACCACCTGTGGTCCAGGCACCTCCCCCCCCA  
 56613 GACATTTGAGTTTTTCAATCCCTGTTTTGTACTAAGGTATAGAACTTGTTAATTATGGACC  
 AGTAGAGTCAGATGTGAGTAAGGAGATGGGGGAGAGAGGAAAGTGGAGGGCAGGAGGGAA  
 GGTGGGGAAAATTAGAGTAAAGGCTGAAGCAACCCTTTACCTCCTCAGCCCTCCTTGAAT  
 GTCTCTAATGATGCTGGTGTCTAGAAGTGGGTCTTGTCTTAGGCAGTTAAATCTTCCAT  
 CATTCTATCTTATTTTTTGATATTTGTGCCTTAATCTATAAATATTCACCTCTAGGCAGTA  
 [A, C]  
 ATTTACAAGCAAGGTTCAAGCTTGGTAATTAATATTTGTGCCTCTCTATGTAAGTTATGT  
 CTTTAAATAGAGCAATTGCTTTAAGCATTTAAGACATTCCACGTATATTGCAGAGTAAT  
 TACTTTCCAAAGATATTTCCAAGTATATTTGTTACATCTAAATATACATTTACAGTAC  
 TCAGTAGACCAGAATAGCTCTAATTTATATATTTGGTCCACTGGGTTAGAAAAAGAGACA  
 TTTTAAAGTATGTTTTAATCAGTGTGTTTATCCCAAAGATACTGTTGGCTCCTCCAGA  
 58383 CCTGGGGTGTGACTTCTAATTCTAAGTGGGCTGTAGTATGGGGGACTAGGATGTCTTT  
 GGTGAATACTTACTGAAATGCATTGGGTTAGAAAGCCTTGGATTAACTGGACCAATTTA  
 TTTTCTTTCCTCAAACTGAGTAATCACATTTATCCACCATTTAGAAAAGAGTAGATACT  
 AATAACATGAAAATTTTGAAGTATTTATGCAGCTTATTGTTTCTGGCTATATGGGAGGC  
 TAGATAACTTAGCTGACTCTCCCACTTAAACAATTTTAAATAATGGATAAAACATTTAA  
 [G, A]

CAATCCTTTAAATACCTCAGTGAGAAAGCAGGAACATAAGAGGCCAAAAAC  
 TCAGAGAAAGTTGGGTTCTAAAGCAGACTTTTGCTTTGAGAGTATTTGCCCAATGCAGGT  
 GACCTTGAACCTCTGATTGTTACGACCTCAAGAGATATGGGGACAGGAGTCAAGCCTAGGG  
 CAGATCAGTCTGTTAGAAAACCTCCTCTACATAAAAGCTGAGACCCCAACAGACCCAGT  
 AGGCTACCTCTCTAGTGTAAGGATGAAATAAAAAATAAACATGCCCTGTCTTCTCTCAAGG

58512 CTCAAAACTGAGTAATCACATTTATCCACCATTTCAGAAAGAGTAGATACTAATAACATG  
 AAAATTTTAGAATATTTATGCAGCTTATTGTTTCTGGCTATATGGGAGGCTAGATAACT  
 TAGCTGACTCTCCCACTTAAACAATTTTAAATAATGGATAAAACATTTAAGCAATCCTT  
 TAAATACCTCAGTGAGAAAGCAGGAACATAAGAGGCCAAAAACTCAGAGAA  
 AGTTGGGTTCTAAAGCAGACTTTTGCTTTGAGAGTATTTGCCCAATGCAGGTGACCTTGA  
 [A, G]  
 CTCTGATTGTTACGACCTCAAGAGATATGGGGACAGGAGTCAAGCCTAGGGCAGATCAGT  
 CTGTTAGAAAACCTCCTCTACATAAAAGCTGAGACCCCAACAGACCCAGTAGGCTACCT  
 CTCTAGTGTAAGGATGAAATAAAAAATAAACATGCCCTGTCTTCTCTCAAGGATGTGTGAA  
 GAAAATTGCCCTGCCTTAAACCTTGATGCTGAGTGGGAGCCAAAATGTTTCCTCTGAGAAC  
 AGGAACCACAAGCTAAGCTTTCAGTAGAATTCATATAACAGACTAGTCTGAGAAAGCCTC

59951 GTCAATCTAGAATTTTAGACCTATTAACCATGTTCCACAACACTCTTACTCTATTTTCT  
 GTTTTTTCCCTTCTTTTTTCCCTTTCAAGCTTCAATCTACCTTTGAGTTCATTAACCTT  
 TTCTTCAGAGTTTTTTTATGTTAATTCTAGCCAGTGAATTCCTAAAATTCAATATAATAC  
 TTTACAGTTCTAGATCCTTTTGATTCTGTCTTATGGGTTCCAGTTCTCCGTTGAGCTACT  
 CTTTCTTTTCTTTGCCACACAGATGATAGTAATTTTGAAGTCTCTGTCTGCTAATGCCA  
 [G, A]  
 TAGTGTTAGTATCTCTAGGCTACCTCAACTGATGATTTTATCTCATGATTACAGGTTAC  
 CATTTTTGTGTTTCATGTTTAGACTTTGTTAGGAGATTTTTTTTGGTTTTCTCCCTCAG  
 TTGTAATGTATAGGCCTTATTCCTAGGATATGATTCTTACCCATAGGACAAAGCCTTTTT  
 GTGTAGTCTGAATATCAACTAGTATGCTGCAATTCATTTCTGCCACTAACCCCTGGAGT  
 TAGCAGACACCCTAAGTTAAGGACTCAGTCTCTATAAGACTGCTCTCACTTCAAACGCT

63246 TTAGTCCATTTTCTGTTACTATAACTAAATACCTGATAGTGGGTAACGTATAAAGAAAAG  
 AGGTTTGTTTTGGCTCACAATTCTGGAGGTTGAGAAGTCCAAGATCAGGCAGCCACATCT  
 GGGTGACTTCTGGTGAGGGCTTCATGCTGCATCATGACATAATATAGTAGGGAAGTGGGT  
 GGGTGTGAAAAGGGGAAAACCTCAGGGAGAAGCCTTGCTTTATAATAACACACTCTTGTA  
 CTAATTCAGTCTGTGAGAGCAAGGACTCACTCACTTCCTCGAGAATTAATCCAGTCTGT  
 [T, C]  
 GAGAGTGGCATGAATCCCTCTTAGTGACCTAATCGCCTCTTAAAGACTCTACCCCAACA  
 CTGCCACACCAGGGACCAGATCTCAGCTGGAATCTTGGGGAGCACTCTCAAACCATATA  
 TGGGAGCTCTTTTGTCCAGAAGTCAGGCTAGCTCTAAGACCTAACCCTCTACTCACATG  
 GTTGATATTTCTGGTGACCAGCCCCTGTCTGAGCCATCTCATCTCTTAATGTAAACTCA  
 GGTGTGATATAAGGTGTGATATAAGGTGTGATAAATAATAAGATACTCCTATTACTCC

63904 CCACTGGGTCTCCACTGCCCAAAAGCTCAGAGTATTTACCAAGCTCTCTATACTTTGACT  
 GGGCCAGAAATTTACCTACTCAGTGCTATACAACCTGTAAAATCTCTGTTGAGCTCTTAG  
 CTCCTCCAAATATTTCCAGGCCCTGAAATCTTGCTGCTGTCTTACAGCTTAGGATTTAG  
 TCCGGGACCAAAAGAGAAAACCTATTTCAGGCTTTTGGGGCTCCTTTTCTGTAAGTTGCTCT  
 TATCCTGAGCTCAATTCAGTCTCAGAAATCTCAGACTTTGACATCTTTTCTTCTGCCT  
 [A, G]  
 GTAAGACTGCTGCTCTCTACTTGAGCTCCATTTCCCTGTGACAAGGTTTGGGCCGTGAAC  
 CCATTAAAAACTACCTCAGGAAGAAAACGGGGGTGAGTGTGGTGCTCATCTCGTGTGTT  
 TTCTTTCTTTCAAGAATAGCAGCACATGATGCCTGCCTCCAGGGCCTAGAAAGAATTGTT  
 TTACTGTTCTAGTCCAGCTGTACAGTGATTTTAAAGTCAAACAACAGCTATTTTATTGAA  
 GCCAGAACCATAAAGTTGCCAATGTTTCCCTCAGTATAGAACTTTATACCATCAAATATCTT

65698 GAGGTGGGAGGATCATTGAGCCAAGGAGTTGAAGCTGCAGTGAGCTCTGATGGCACCA  
 CTGCACTCCAGCCTGGTGGCAGAGCAAGGAAAAGAAAAATAAGACAGGACCAAAGTTGA  
 TGAGTTAAACATCTCCACCTCACAATGTTAGGAAAAGAGTAGCAGAGTAAACCCAAATAA  
 AGTTGAAGGAAGGAAGTAATAAAGAACAATAATAAAAGGAATGGATAAAATTGAAAAA  
 AAAAAGTACAACAGAAAGGTTCAACAAAGCCAAAGGCTGATTTTTGAAAAGAACCAATAAA  
 [T, A]  
 CTAACAAAACCTATGTCAAGAGTAATAAAGGAAAGAGGAGAGAGGGAGGAGGAGGAATAA  
 ATACACATATCAGAAATGAAAAGAAGATGTAATAATTAAAGCTGCAGAAATCAAACAAT  
 AATAGATCTTATTTCAACCAATATATTTGAAAGCTCTGCTGGTCAAATTTCTGAAAAA

AAATTTGTCCAACTCACTTCAGTAGAAATAAAAAACCTAATCAGTCTTAGCATCATTCA  
AGAAATATAATCAGATTCTAACTGGAAATCTTCCCACAAAGAATATGTCAGATCCAGAT

66118 TAATAGAATCTTATTTACCAATATATTTGAAAGCTCTGCTGGTCAAATTTCTGAAAAA  
AAAATTTGTCCAACTCACTTCAGTAGAAATAAAAAACCTAATCAGTCTTAGCATCATT  
AAGAAATATAATCAGATTTCTAACTGGAAATCTTCCCACAAAGAATATGTCAGATCCAGA  
TATTTTACCAGTGGGTACTAACAAATTTTCCAACAACAATTTTCATCTCATATGAAC  
TACTCCAGAATCCAGAAAAAGTGGGTATATTGATGAGAATAACATAAACTTGACACCAA  
[A, G]  
CCTGGTAAGAATGTTTTTTTAAATGCCAGTTTGTACATAAAATACAAAAGTCCTAAGCAAA  
AATTAGCAAATATATTTAGCAGTCTATTAATAAAAGATAAACCAATAACAATTTGGATTT  
ATCTCAAATATATTTGTTTGGCACTAGAAGTCTCTTGATGTATTTACCACAGAACAAT  
TTTTAAGTGGATAAGTCATATAATCATCTCAATAGATATAAGAAAAGTATTTTAAAAATCT  
AATATCCATTCATTTATTAGTGTAAAGAAAAATTTCTTACACTAGGAGAACCAATAGAAG

66158 TGGTCAAATTTCTGAAAAAAATTTGTCCAACTCACTTCAGTAGAAATAAAAAACCT  
AATCAGTCTTAGCATCATTCAAGAAATATAATCAGATTTCTAACTGGAAATCTTCCCACA  
AAGAATATGTCAGATCCAGATATTTTACCAGTGGGTACTAACAAATTTTCCAACAACAAC  
AATTTTCATCTCATATGAACACTCTCCAGAATCCAGAAAAAGTGGGTATATTGATGAGAAT  
AACATAAAGTTGACACCAAACCTGGTAAGAATGTTTTTTTAAATGCCAGTTTGTACATA  
[A, G]  
ATACAAAAGTCCTAAGCAAAAATTAGCAAATATATTTAGCAGTCTATTAATAAAAGATA  
AACCAATAACAATTTGGATTTATCTCAAATATATTTGTTTGGCACTAGAAGTCTCTTGAT  
GTATTTACCACAGAACAATTTAAGTGGATAAGTCATATAATCATCTCAATAGATATAA  
GAAAAGTATTTTAAAAATCTAATATCCATTCATTTATTAGTGTAAAGAAAAATTTCTTACA  
CTAGGAGAACCAATAGAAGGGAACCTTCTTTAACTTCAAACACCATTTTTTTTAAACCAG

66604 GTGGATAAGTCATATAATCATCTCAATAGATATAAGAAAAGTATTTTAAAAATCTAATAT  
CCATTCATTTATTAGTGTAAAGAAAAATTTCTTACACTAGGAGAACCAATAGAAGGGAAC  
TTCTTTAACTTCAAACACCATTTTTTTTTAAACCAGTAGCAAATAATAAATGTATTTAGTA  
TATAATGCGAGCAAGGTTTTTCACTGTTAGGAAAGGGTTTTACAGATATGGAAAGTGGGA  
AGTCTAGAATGGTACATTTGTTTTCAGATGGGAGTTGGAAGTATCAGTTAAGTATTGCTT  
[G, A]  
AAGTTAAGAGTGTGTGTGTGTGTGTGTGTGTGTCTGTAACATTCTCTAGCTCTGTGTGCT  
GAGAAGGCACAGAAGCAGTGATACTCCAGTAGCAATGTACACCCCTAGCAGCCAGGTTTT  
CCACTGAAGGGAACCTAAGCTTCCTTGAGAAGTGGGGAAATGGAGCAGAAAAAGTATACAA  
TGAATCTGGAAGGTTATTTGGTGTGAGAAAAATAAAGCAGCGCTCAAAACATCATGGGGA  
CTTGTCAAACGATACAATAGTCAACTTAAAGGACTCATGCTGGCCACATCTGGACAATT

67766 GATTGGGGACAAAAATATGAGATGACACCATGACAAAACCTCAAAACACCTGACTTTGGT  
TTTGGTGGCAGGAGGCATTGAGACTGCTGGTGAAAGCTTGCAGGGGCTGTGAGAGCGGGC  
TGGCAGAGTCTGAGGAGGCTCTCAGTGGGCACTTAAAGTCAAGGGAGGAAAATGTTCCA  
AGAAGTTGGATGGAAGAACCCTGGATGTGGGGTAGTGGGTGGTTAATAATATTGTCACC  
TCTGGTAATGCAGTAAGATAGGAAATATGCTAAATAAACTTGATGATTCCACTAAAGAGG  
[C, T]  
TATCAGACAGAAGTTAGAAAGTACCACCAGATTAGTTTTTTTTGTTTGTGTTTTTCTTTCT  
TTTTTTTTTTTTTTTTTGCCTATGTTAAAAATGAGAGGGAGAGGTGAGCTGGAGGACA  
AACTGTTAAATATAAAGGAGCCAAGACTCACCAGGCTTGAAGTCAAACCTGTTCCATTT  
CCAGCCTCTCAAAGGTGGTGAAGGTTGTCAAATTAAGAAAAGATTTTCAAGTCAAAAAGA  
AAATCCATGAGGGGTACCTATAAGGTTCTTTGTTAAAAACCTCAGAAATATTCAAGGTAT

67863 TTGCAGGGGCTGTGAGAGCGGGCTGGCAGAGTCTGAGGAGGCTCTCAGTGGGCACCTAA  
AGTCAAGGGAGGAAAATGTTCCAAGAAGTTGGATGGAAGAACCCTGGATGTGGGGTAGTG  
GGTGGTTAATAATATTGTCACCTCTGGTAATGCAGTAAGATAGGAAATATGCTAAATAA  
ACTTGATGATTCCACTAAAGAGGCTATCAGACAGAAGTTAGAAAGTACCACCAGATTAGT  
TTTTTTGTTGTTTTTTCTTTCTTTTTTTTTTTTTTTTTTGCCTATGTTAAACATGA  
[A, G]  
AGGGAGAGGTGAGCTGGAGGACAACTGTTAAATATAAAGGAGCCAAGACTCACCAGGCT  
TGAAAGTCAAACCTGTTCCATTTCCAGCCTCTCAAAGGTGGTGAAGGTTGTCAAATTAA  
GAAAAGATTTCAAGGTCAAAAAGAAAATCCATGAGGGGTACCTATAAGGTTCTTTGTTAA  
AACCTCAGAAATATTCAAGGTATCATAGACTCTTCCATCCAGGAAAAAAGGAGGACTTT  
TACAGATCTTAAGGTGTGCTTGTGCTGAACAACAGGGCTTCTAGCATCTTAAGAGCAT

69511 TTCGATCCTGGATTTTGTGCTGCTGCACTAATAGATTGGGGATATTAGAGAGAGGATTA  
TTGCATATGGGAGGGATGTGAATTGTGGCCAGAGGGTGGATCATAGCAGATTGATTTTCC  
AAAGATGGCAGCAGCAATATCTCTCATCACGCATATCCTTATAACATGAATTTGACCTTT  
CTTCCATGTAGAGATGGGATCTATTTCCCTCTTGAATCTGGGCAGGTTGTAACGTGGC  
AGATGTGATTCTATATGACTTCTAAAGCTTTGTCATACAAATGACAAATCATCACCTTGC  
[C,T]  
GGCTAGATTGCTCACGGTGGATCCCCAAACCACCATATAAACAGTGCCCTGAGGTTACCA  
TCTTGTGAAGGAGCCCCAAGTGAGCCAACATGTAGAGACCACGTGGAGATGCTCTGAGGCC  
ACACGAAGAGAAAGAGAGACGCTCAACAAGCCCCAGCTGGCTAGCCCCCGCTCTCCCA  
GCTCTGGCTGTTGTCTGACTCTAACCACATGAGGGACCCAGAGCCAGAATCACTTAGCTG  
AGTCCATCCCAAATTCCCAACCCACAGAAATCATGAAAGATAATAAAATAAGTGTGTGT

69538 CTAATAGATTTGGGGATATTAGAGAGAGGATTATTGCATATGGGAGGGATGTGAATTGTG  
GCCAGAGGGTGGATCATAGCAGATTGATTTTCCAAAGATGGCAGCAGCAATATCTCTCAT  
CACGCATATCCTTATAACATGAATTTGACCTTTCTTCCATGTAGAGATGGGATCTATTTT  
CCCTCTTGAATCTGGGCAGGTTGTAACGTGTGGCAGATGTGATTCTATATGACTTCTAAAG  
CTTTGTATACAAATGACAAATCATCACCTTGCTGGCTAGATTGCTCACGGTGGATCCCC  
[A,G]  
AACCACCATATAAACAGTGCCCTGAGGTTACCATCTTGTGAAGGAGCCCAAGTGAGCCAA  
CATGTAGAGACCACGTGGAGATGCTCTGAGGCCACACGAAGAGAAAGAGAGACGCTCAAC  
AAGCCCCCAGCTGGCTAGCCCCCGCTCTCCAGCTCTGGCTGTTGTCTGACTCTAACCA  
CATGAGGGACCCAGAGCCAGAATCACTTAGCTGAGTCCATCCCAAATTTCCCAACCCACAG  
AAATCATGAAAGATAATAAAATAAGTGTGTGTCAAACCTCCAGGCTTTTGAATGGTTAC

69782 GTCATACAAATGACAAATCATCACCTTGCTGGCTAGATTGCTCACGGTGGATCCCCAAAC  
CACCATATAAACAGTGCCCTGAGGTTACCATCTTGTGAAGGAGCCCAAGTGAGCCAAAC  
GTAGAGACCACGTGGAGATGCTCTGAGGCCACACGAAGAGAAAGAGAGACGCTCAACAAG  
CCCCCAGCTGGCTAGCCCCCGCTCTCCAGCTCTGGCTGTTGTCTGACTCTAACCAT  
GAGGGACCCAGAGCCAGAATCACTTAGCTGAGTCCATCCCAAATTTCCCAACCCACAGAA  
[C,T]  
CATGAAAGATAATAAAATAAGTGTGTGTCAAACCTCCAGGCTTTTGAATGGTTACACAA  
CAAAACATAACTGGAAAATAATTATAACACACTGAATAAAATAGGAGTGCATGAGTCCCT  
ACATACATAAATGAATAAAATAAGTAGATGGACATAAAGGAAAGCTCTTCTGGTAGAATG  
CCAGATAAGAAATATAGAAGGAAAGATGGAGTTAAAAAAGAGTCTCAGCAGATACGG  
AAAACCAACAGTCAAAGTTTGATGAGGAACAGAATATTTACATATTCTGCAAGTGTCTT

70895 TGGGGCTTTAGCTTGTTCTCAAATGGTTCCCCCAAATACATGTATGTACTGTGTTTAT  
ATATGTATAAATATATACATGTATGCCTATATATTTATATATATATGTGTGTACATATAG  
ATACACACACACTATATATGTGTGTCTCTGTGTGTGTGTGTGTGTGTATATATATA  
TATATGTGAGAGAGAAATGATAAGCAAATGGGGCAAATGCTAAATCTGAGATAAAGTAT  
AGGAGATCCTTATACTATTCTTGCTATTTTTCTGTGAGTTTGAAATGATATCAAAATAAA  
[T,A,C]  
ATGAGCAGGATGAGAGCACCTGCTATCTCACTTCTATTTAATATTGCACTGGAGGTCCTA  
GCTAGTGCAGTAAGGCAAGAGAAAGAAATAAACAATATGAAAATTTGAAAGAGAGAAACA  
AAACTGTGATTATTCACAAATGATATGGTTGTGTAGAAAAGCCAAATGCTCTGTGAATAC  
ATTACTAGGATAACTAATATCTTTTAATAAGGTTGTTAAATACAAATCAACATGCAAAA  
TGTAATTGCTTATCTGTATAACAGTAACAAAGAGAAATGTAATTTAAATTTGATACCAC

71575 TTGTTGAAGGGGCTAATTAATTAATAAGAAGGTCAGTATTGTAAAGGAGTTTATTCTCCC  
CCAAAATGAACAGTGTATTAACCTTGTTATAGAAAGTATATGAATGAGTGTGTGAATTTG  
ACAAGCAGGTTCTATAATTTATGTGGAACCAAAGGACCAGAAATAATGATGGCCACCCT  
AAAGAAATAGCACAAAGACACTGCTGGTGAGAGCAGAAGCTTGTGCAACTCTTTTGGGAAA  
CAGTTTGGCTTTATTTAATACAGCTGAAAATGCCGTACTCTAGGAACCAGACACCCCACT  
[C,T]  
CCAGGAGCAACCTCTCATAGAATCTTTTCCATATTTGCACTGGGAGACATGAACAAGAAA  
GTTCTAGCACCTCTGTTCAATTTAAATTTATAAACAATTTTAAGATCTAGCAACAGAG  
GAATGTATAAATCTAAATTTGTGATATAGTCTACAGTGATAAAGAATATAGCAATTATCC  
TATAATAATATATAGAATATAAAGAGATAGATCTGGAATACTATACCCAGAGTGAAAATG  
AATGAATTACAGTTACATGTAATAAAATTGATGAGTCTCAGGCACATAATATTTGGCAAA

72112 AATGAATGAATTACAGTTACATGTAATAAAATTGATGAGTCTCAGGCACATAATATTTGG  
CAAAAAGAAGCAATGACAAAAACAAGTAAATTTATTATACATAAATTATACATGGATAAT  
CACTGTATTGTTATTTTATATGCCACATATACTTTATAACTACTTTGCTTCTATTTCATAA





GGATGGTTTCAATGCCCTAATTTAGCTTGCTCTAATTCTCCCTAAGCAGCTCTTTCTCA  
GTGGGAAACAAAGAAGCTGCCTTTGAGTGGGAACCTGTGTATCCTTGTGAGGTAGAAGT

84585 AATCCAATTTCTTCCCAGGCCTCCAAGGGCTTGTGTGATCTCACCTCTGCCTGCCTGTCT  
CCGTTCAAGCCCGTCCATCTCTCTCCAGCTTCCCATGCTCCAGACACGCTGACCTGTC  
CTCCTTCTGCCCTCAAGCAGGACACACCTGCTCCACCCTGGGCCTGTGCACATGCTGT  
GCTGTCCCTCTCCCTGAGCGGCTCCCTCGGATCTTTTGTGACTGCTGCTGTCTCATCT  
GGTGTCTCCAGATGTTAACTTCCCAGAGAGACCACCTGACGTTCTGTCACAAGGAC  
[A, G]  
CCCGTCTTCCCTGCCACCTGTGACTTTGTTTTAGCTTCTTACAGCAATTGTTATTATG  
GGAAATTGTCTTATTATTGTTAATGTCTGTACAGTGGACTAGGATGTGGCTCTAAGA  
CAAAAATGCTCTCAGACTTGGTATTTTAAATGTGTTTCAAATTTACAATTGTAATAA  
ATGGGTAACATAATAAATAATAAATTGTATATTAGGTCCCTGGACTGCTGTTGAATGAAT  
GAATGGCAACAATGATAGGAGTAGTTGCTGTTTATTGAGTACCTGTTATGTGTCAGGCTC

85092 GTATATTAGGTCCCTGGACTGCTGTTGAATGAATGAATGGCAACAATGATAGGAGTAGTT  
GCTGTTTATTGAGTACCTGTTATGTGTGTCAGGCTCCACATTTAATCATCACACCAAACCCA  
AGTGACCAGTGCTGTCAACCTCACTTTACATATAAAAAACATATTAACCAAGATT  
CACAAATGTTACATGATTTTCACTTTTGTAAATAGGCGTAACAGCCTGGATTCAAGCCCAG  
GTCTGACTGGTTTCAAGAACCATGCCCTTTCTCTAAAGAAGAAGTAGGTAACCTTGCTATG  
[T, -]  
CATCCACTATCTGGTGGTTTTCCCTGCTGGCTGGTTTTCCCTTTCTCTCCCACTCTGCAC  
CCACGCAGCTCCAGGCATGGATGCCAGTCCATTGAGATTTCTCTATGTCTGCTGTGTGT  
TAGTCTACTTGGGCTGCCATGACAAAGTATTGCAGACTGGGTGGCTTCAACACCGGAAGT  
TTATTTTCTCACGGTCTGGAGGCTGGAAGTCTGAGCCAAGGTAAGTGGGAGGATTGGTGA  
GGCCTCTCTCTGGGCTTGACACAGCTACCTTCTTGCTGTGCTCCTCACATGGCCTTTCC

85096 ATTAGGTCCCTGGACTGCTGTTGAATGAATGAATGGCAACAATGATAGGAGTAGTTGCTG  
TTTATTGAGTACCTGTTATGTGTGTCAGGCTCCACATTTAATCATCACACCAAACCCAAGTG  
ACCAGTGCTGTCAACCTCACTTTACATATAAAAAACATATTAACCAAGATTCAACA  
AATGTTACATGATTTTCACTTTTGTAAATAGGCGTAACAGCCTGGATTCAAGCCCAGGTCT  
GACTGGTTTCAAGAACCATGCCCTTTCTCTAAAGAAGAAGTAGGTAACCTTGCTATGTCTAT  
[C, -]  
CACTATCTGGTGGTTTTCCCTGCTGGCTGGTTTTCCCTTTCTCTCCCACTCTGCACCCAC  
GCAGCTCCAGGCATGGATGCCAGTCCATTGAGATTTCTCTATGTCTGCTGTGTGTAGT  
CTACTTGGGCTGCCATGACAAAGTATTGCAGACTGGGTGGCTTCAACACCGGAAGTTTAT  
TTTCTCACGGTCTCTGGAGGCTGGAAGTCTGAGCCAAGGTAAGTGGGAGGATTGGTGAGGCC  
TCTCTCTGGGCTTGACACAGCTACCTTCTTGCTGTGCTCCTCACATGGCCTTTCTCTG

85100 GGTCCCTGGACTGCTGTTGAATGAATGAATGGCAACAATGATAGGAGTAGTTGCTGTTTA  
TTGAGTACCTGTTATGTGTGTCAGGCTCCACATTTAATCATCACACCAAACCCAAGTGACCA  
GTGCTGTCAACCTCACTTTACATATAAAAAACATATTAACCAAGATTCAACAATG  
TTACATGATTTTCACTTTTGTAAATAGGCGTAACAGCCTGGATTCAAGCCCAGGTCTGACT  
GGTTCAGAAACCATGCCCTTTCTCTAAAGAAGAAGTAGGTAACCTTGCTATGTCTATCCAC  
[T, -]  
ATCTGGTGGTTTTCCCTGCTGGCTGGTTTTCCCTTTCTCTCCCACTCTGCACCCACGCAG  
CTCCAGGCATGGATGCCAGTCCATTGAGATTTCTCTATGTCTGCTGTGTGTAGTCTAC  
TTGGGCTGCCATGACAAAGTATTGCAGACTGGGTGGCTTCAACACCGGAAGTTTATTTTC  
TCACGGTCTCTGGAGGCTGGAAGTCTGAGCCAAGGTAAGTGGGAGGATTGGTGAGGCCTCTC  
TCCTGGGCTTGACACAGCTACCTTCTTGCTGTGCTCCTCACATGGCCTTTCTCTGCACG

85318 GGATTCAAGCCCAGGTCTGACTGGTTTCAAGAACCATGCCCTTTCTCTAAAGAAGAAGTA  
GGTAACCTTGCTATGTCTACCTATCTGGTGGTTTTCCCTGCTGGCTGGTTTTCCCTTTC  
TCTCCCACTCTGCACCCACGCAGCTCCAGGCATGGATGCCAGTCCATTGAGATTTCTCCT  
ATGCTGTCTGTGTAGTCTACTTGGGCTGCCATGACAAAGTATTGCAGACTGGGTGGC  
TTCAACACCGGAAGTTTATTTTCTCACGGTCTGGAGGCTGGAAGTCTGAGCCAAGGTAC  
[C, T]  
GGGAGGATTGGTGAGGCCTCTCTCCTGGGCTTGACACAGCTACCTTCTTGCTGTGTCTCCT  
CACATGGCCCTTTCCCTCTGCACGCATGCCGGGAGAGAGACGGCTGGCCTCTCTTCTTATAA  
GGACACCAAGTCTATCAGATTTGAGCCCTGCCCTCTGACCTCATTTTACGTTAATTACC  
TCCTTGAGAATTCTAACTCCAAATATAGTAACACTGGGGTTAGGATTTTAAATGAATGT  
GGGGTAGGGGGACTCGGGGGTGGCAGGGGCACAATTCAGTCCCTTACACATTCTGTGGA



85467 GCATGGATGCCAGTCCATTACAGATTTCTCCTATGTCTGTCTGTGTTAGTCTACTTGGGC  
TGCCATGACAAAGTATTGCAGACTGGGTGGCTTCAACACCGGAAGTTTATTTTCTCACGG  
TCCTGGAGGCTGGAAGTCTGAGCCAAGGTACTGGGAGGATTGGTGAGGCCTCTCTCCTGG  
GCTTGACACACAGCTACCTTCTTGCTGTGTCTCACATGGCCTTCTCTGACGCATGCC  
GGGAGAGAGACGGCTGGCGTCTCTTCTTATAAGGACACCAGTCTATCAGATTTGAGCCC  
[C, T]  
GCCCTCCTGACCTCATTTTACGTTAATTACCTCCTTGAGAATTCTAACTCCAAATATAGT  
AACACTGGGGTTAGGATTTTAAACATGAATGTGGGGTAGGGGGGACTCGGGGGTGGCAGGG  
GCACAATTCAGTCCCTTACACATTCTGTGGAACACTTTTTCCGATGCCTTAATTATACC  
CAACTGATTAAAATACAAAAGTAATATTAACAGTTCCCAATCAGTGCTTGAGGGCTAGAA  
AACATTGAAATATGTGATCCCTGCCCCGAGGCACTTAGCGTTTCAAATCTCGGACTCAT

85488 GATTTCCTATGTCTGTCTGTGTTAGTCTACTTGGGCTGCCATGACAAAGTATTGCAG  
ACTGGGTGGCTTCAACACCGGAAGTTTATTTTCTACGGTCTGGAGGCTGGAAGTCTGA  
GCCAAGGTACTGGGAGGATTGGTGAGGCCTCTCTCTGGGCTTGACACAGCTACCTTCT  
TGCTGTGTCTCATATGGCCTTCTCTGACGCATGCCGGGAGAGAGACGGCTGGCGTC  
TCTTCTTATAAGGACACCAGTCTATCAGATTTGAGCCCTGCCCTCCTGACCTCATTTTA  
[C, T]  
GTTAATTACCTCCTTGAGAATTCTAACTCCAAATATAGTAACACTGGGGTTAGGATTTTA  
ACATGAATGTGGGGTAGGGGGGACTCGGGGGTGGCAGGGGCACAATTCAGTCCCTTACAC  
ATTCTGTGGAACACTTTTTCCGATGCCTTAATTATACCCAATGATTAAAATACAAAAG  
TAATATTAACAGTTCCCAATCAGTGCTTGAGGGCTAGAAAACATTGAAATATGTGATCCC  
TGCCCCCGAGGCACTTAGCGTTTCAAATCTCGGACTCATTGAGTTGTGTGCTTTATTAAT

87268 GAGTTGCTATTTTGAATCATTTCATTTGATGATTCTCAAAGATTTCTGAGAGCCAACTA  
GATGCCAGGCACTCTCCCCGGTCTGAAGATAGGGTGGCAGGCAGTACAAAGCTCCTGCC  
TTGGTGAGCTTGCAAGTCTCATGAATTAGGATTTCCAACTGCAAGTGACAAAAATGCAA  
CCCAAAGTGCTTTAAGCCAGGAGAAAAGGATCTGTAACGGGAAGACTAGTGATAACTGG  
TTCCATATTATTGCTGGATTGATTTCAGGGCTCAGCAGGGAAGCAAGTGACAGCCTGCCC  
[A, G]  
ACTGCTCAGCTGAATCTCTGAGGTTTCTCTTGCTGGACCAGCTTGGGTCTCTGGGACCAT  
CCCTGAACACCAGTTATATAGAGAAGGAAAGACTGCTGTACCTAAGGTTAAGTGGAGACA  
TGTTTTCCCTCTGCTGCTGGGGATGGGGGTCAGCTTACCCTAAGAGTGGGGCTGGGGT  
CATTTTGCTAAAGCAAGCTCAGGACATGCTTGCCCTAGGAAGGAACAGTGAATGCTTGAT  
GAAAAAATAATTTCTTTAAGGTAGTTACTTTTTAAAGTTTTTAAACAACTTCAGAAAG

89813 TTTCTTCCCTTCAGGTCTCATACTTTTATTTGTAAAGTGGTGCTAATAATAGTCTTTCTT  
CTTTCACCTGGATTGATGAAAGACTCAAGTACTAACCACATACAAAGATTATGTAAATTT  
AATGCATTCCATGGGGGTCAGGGAATAAATATCCTTTGTAAATTTGGTTTTAAGAACGAT  
TTTAAATTTTTCCCCCAATTACAAAATGGATAAATTTGCATTGTAGCCAATTTGGAAATA  
TAGCAAAGCACATAAAAATATTTTAAATTATCATCCAGACATTAAAAACCATTACCATT  
[G, C]  
GCATGTATCTCCCAACCAAGCTTTTTCTATGCACGGGTTAAGAAAAACAAGCATTTCAGC  
ATCTCTGTTCTTATATCCTTGTCATATACTCCTAATTTTGTCTTAACATAGAGTCTAG  
TAGTAAATTTGTTGGAGTGTAGAGCAGAAATATATGCAGAGTTTCAGATCTTTAGAATAT  
AGTGTCAAACCTGCCATTTTGAAAGGTTATTCAATTCACATCCCAGAAATTGAAGATAATG  
CTGCCCCCTTCCCCACCTGTCCTTTGCTGGGTGCTAACATTTCTAAACATCTTTACTAAT

91487 TGCATGGGTATGATCTCGGCTTAATGCAACCTCCACCTCCCAGGCTCAAGCAATTCTTCT  
GCCTCAGCCTCCTGAGTAGCTGGGAATATAGGCACCTGCCACTATGCTCAGCTAATTTTT  
GTATTTTTTAGTAGAGAACAGGTTTCACCATGTTGGCCAGGCTGGTCTCAAACCTCCTGACC  
TCAGGTGATCCACCCACCTTGGCCTCCCAGGTGCTGGGATTACAGACATGTGCCACTGA  
CCCTGGCCAGTTTGTACATTTTTTAGTCGGTTGAGAGTTCAATGTTTGCTATAAGGCCGA  
[T, -]  
TTTTTTTTTTTTTGGAGACAGGGTCTCACTCTATCTCCAGGCTGGAGTGCAGTGGTGCAA  
TCATGGCTTACTGTAGCCTCGAATTCCTGGGACCAAGATCCTCTTGCCTCAGTCTCCCA  
AAGTGCTGGGATTATAGGAGCCCAGCCTCAAGGCAGAGAGGCAGAGATTTGATTTAATTA  
TCTTCCATGTGGTTAACTAATTGTTCCAAACACCATAAATTAATGACATATCCTTTCTTT  
TTTTCTTGAAATGACACCCTATTTACATGTATCTTCTAGATTTTTTAGTCTGTTGTTTT

92081 TTGTTTTGATCTGCCTGTTCTGCTGCCATACCCCATTTGTTTTGGTAACCTTAGTTTTAC  
AATGCACTTTAATGTTAGAGAAGTCAACACCTCAGACTGCCTTTTCTGAATCTTTTTTTA  
GAAATGTTTTCCACATGAGTGAATTTGAATAATTTTTGTTATGTTCCCAAAAGAAATCCC

ATTCACAATTTATTGGAATTGTGTTACTGTTATAGGGGAATATGGAGAAAATTTAAATCT  
 TTACAATCCTGAATTTTCCTATTACAGGGACACAGAGTCTCTCCGTTTACTCAACCCCTCT  
 [A, G]  
 TTTTCTCAATAAATTTCTGTCATTTTCTTCATAGGTGTTTTGCACATTTTATAGACATT  
 TTATATTTTGGTTGCTTTTGGATTTTGTGTCATTATAATTTCTGGTTTTGTGTATGTG  
 TTTGTATTAATTTATATTGTAAACAGTGCCTTACTAAATCTCTACAAATCTAATAGTA  
 ATTTTGTGAACGTAGATTTTTTCCAGAAAATATGATAATTTCTCCTCTCTTTTCAA  
 TGTTTTTGTACTATTATCTTGTATTCTTGTCTAACTGCAGGGTCTAGACCTTCCAGGAAA  
 92888 TATTTTTGCATTACTTTTCATGAGCTGTAGATTTTAGTTTTTACATTTTCATTTCTCATAT  
 GGTGGCTGATGCACTTTGAAAATGAGTTAAGAACTCAATTTTTCAATATACGGAATTG  
 TTGAATATTGTTGCCCTCCTAAGTACTTTGATGTTATTACCAACCTTGCTTTTTTGTCA  
 TTTGGTTTTTCTGACATTCACTTTGCCAACAAATATTTCTTGAGTGCATACTATGTTCTA  
 AATACTAATTTTACTGGTTTATCATTTAATCTATATTTTTTGTATGTTTTGCTTTTTT  
 [A, T]  
 AAAAAAAAAAAGCAGGTGATATTTGTTGAGCCAATCTGAGAATTATTTATGTTATCACAG  
 GAAGATTTAACCTATTTATAGTTATTATAATATGTGTTATGATCAGAATTGCTTCTTGCA  
 GCTATTTTGTCTGAAATTTATGCTTTCTTTTCTTTGTTTCTGTATTGTACTCTAT  
 AAACGTGTTGTTATTTTATTATCATCTCTCAGTGCCTCATATATCCCTAATCTTAAATCT  
 CCCATAGGTTACCTTTAAAAATTTTGAAGTTTTTTTTTTTTTCTTTCTTTTAAAGAGA  
 93194 AAAAAAGCAGGTGATATTTGTTGAGCCAATCTGAGAATTATTTATGTTATCACAGGAAGA  
 TTTAACCTATTTATAGTTATTATAATATGTGTTATGATCAGAATTGCTTCTTGCAGCTTA  
 TTTTGTCTTGAATTTATGCTTTCTTTTCTTTGTTTCTGTATTGTACTCTATAAACT  
 GTTGTATTTTATTATCATCTCTCAGTGCCTCATATATCCCTAATCTTAAATCTCCCAT  
 AGGTTACCTTTAAAAATTTTGAAGTTTTTTTTTTTTTCTTTCTTTTAAAGAGATGGGG  
 [G, T]  
 TCTCACTTTGTGCTCAGGCTGGAGTGCAGTGGTGTGATCATGGCTCATTCAGCCCTGA  
 CCTCCTGACCTCAAGTGATCTCCACCTCAGCCTCCCAAAGTGCTGGCATTACAGGTGT  
 GAGCCACCATGCGCTAGCCCTGTACCACCTCTTAGTTTCTATTATTATTAGGAATTTGGAG  
 CCAACCAATGAAAGACTTTTGTAGTCTTTCTTTCTAAACATGCTGACAATTTATTC  
 AGCTTATTAACCAACATTATAGCATTTATTAGATTTATCTGTTATTTATTGTTGCAT  
 94938 CTCCCAAAGTTCTGGGATTACAGGCATGAGCCACCGCGCCCGCCCGACAGTTTATTTA  
 ATTCTCTTGAGGTGCCGAAGTCTCTTACGTTTCTTCTGAATCTAAAGTAGATCATTC  
 TCAGAGAGGACCTTCAGGATAATGTTCTGTTGTGCGCAATGTACAGATTCTACTCCAC  
 CTCTATCCCACTCCTTTGTACCAGGCCTCATGTTGGGTTTAAATCTCGTGTACTTACCA  
 CTGAAAAGAAGTGATCCATTCCCAGTCACTGCTGACCAATAGTCAGGATGTTTAGAAGC  
 [C, T]  
 TTTGTCCTTGCCGTCTGTCCATGTGGATGGCTGAAGACAGGTTTAAATAGCATCCAATTCC  
 ATAGAATTGGAATTGGAAGAATTCTATAGGAAGAATCCACTTCATGCAGTTCCTCTTCCA  
 GCCCCACTGGCTGCTGCTCTGCCCTGCTGAACACATGGATGGGCACAGGACACACTGCAG  
 TTCATAGTGTATACTGCTGCTGGGGTCTCTGCTCTTACCCACTGTGTGCGGTGTGAATTC  
 ATGTATTCCTGCTTGTCTAGTGGTAACCATCTTCTCTGTGACCAAAGAATACAATTCA  
 95367 GGCTGCTGCTCTGCCCTGCTGAACACATGGATGGGCACAGGACACACTGCAGTTCATAGT  
 GTATACTGCTGCTGGGGTCTCTGCTCTTACCCACTGTGTGCGGTGTGAATTTTCATGTATTC  
 CTGCTTGTCTAGTGGTAACCATCTTCTCTGTGACCAAAGAATACAATTCAACGTTTCT  
 CCTCATATAGCAATTAATAATATGCATATTTGTAAAAAGAAACAATTCTGCCCTATTGGA  
 ACATATATGATGTGAATATAAGTATACCAAGATATTCCATGCTTATAGTTTGGAGTTAGG  
 [C, T]  
 GTCATCAAAGCAAAATGCCTGTTACAGAAGAGGATTAGCAAAGGCGCAGCTCTCTGGAGG  
 AGGTCTGTGAGATACTAGAAAATCTTATCCAGGCCGGGCACAGTGGCTCATGCCTGTAAT  
 CCCAGCACATTGGGAGGCTGAGGCGGGCTGATCATTTGAGGTGAGGAGTTCAGGACCAGC  
 CTGGCCAAATGAGGAAACCCCATCTCTACTAAAAGTAATATAAAAATTAGCCAGGCATG  
 GTAGCTCATGECTGTAGTCCCAGCTACTCAAGAGGCTAAGGCATGAGAATCGCTTGAACC  
 95495 CCTAGTGGTAACCATCTTCTCTGTGACCAAAGAATACAATTCAACGTTTCTCCTCATAT  
 AGCAATTAATAATATGCATATTTGTAAAAAGAAACAATTCTGCCCTATTGGAACATATAT  
 GATGTGAATATAAGTATACCAAGATATTCATGCTTATAGTTTGGAGTTAGGCGTCATCA  
 AAGCAAAATGCCTGTTACAGAAGAGGATTAGCAAAGGCGCAGCTCTCTGGAGGAGGTCTG  
 TGAGATACTAGAAAATCTTATCCAGGCCGGGCACAGTGGCTCATGCCTGTAATCCAGCA  
 [C, T]

ATTGGGAGGCTGAGGCGGGCTGATCATTGAGGTGAGGAGTTCACGACCAGCCTGGCCAA  
CATGGGAAACCCCATCTCTACTAAAAGTAATATAAAAATTAGCCAGGCATGGTAGCTCA  
TGCCTGTAGTCCCAGCTACTCAAGAGGCTAAGGCATGAGAATCGCTTGAACCTGGAAAGT  
GGAGGTTGAGTGAAGCAAGATCACGCCACTGCACTCCAGCCTGGGCGAGAGAGAGCAAA  
ACTGTCTCAAAAAAAAAAAGGAAGAAATCTTATCCAGTCTCTGGGCATCACCTTTCCAC

95755 TCCAGGCCGGGCACAGTGGCTCATGCCTGTAATCCCAGCACATTGGGAGGCTGAGGCGGG  
CTGATCATTGAGGTGAGGAGTTCACGACCAGCCTGGCCAAACATGGGAAACCCCATCTC  
TACTAAAAGTAATATAAAAATTAGCCAGGCATGGTAGCTCATGCCTGTAGTCCCAGCTAC  
TCAAGAGGCTAAGGCATGAGAATCGCTTGAACCTGGAAAGTGGAGGTTGAGTGAAGCAA  
GATCACGCCACTGCACTCCAGCCTGGGCGAGAGAGAGCAAACTGTCTCAAAAAAAAAA  
[A, -, G]  
GAAGAAAATCTTATCCAGTCTCTGGGCATCACCTTTCCACCCAGTCTACCTCCCTGTTG  
GCAACTAAGGCTACTGCAGCATCATATGCATAAGCCATTGCTCTTCCTTCTGAGTGTA  
GGTATCTGGGTATATACATATGTGTGAAGGTACACATTTATCTTATTACAGAATATACTA  
CATAATTTATGATGCAGAGTGAAGAGAGATTGAAAACACATTCAAGTGCCTAAAATACT  
GCTTGGGATATGTAGCAGTATAATTGAAGGACATGTACTATAAAAGTCTAATGTGTAATA

97031 CACCCACCATGGCCATGTCAGCTGGCTGCATCCCTGCTGCCCTGTCTCTTTCTCTGCCT  
CTCAGCCTCTGAATACTCCTGGCTTCTGCCTCCTCCTAAGTCAAGCTTGGCTTGGATCCCT  
CTGGTTCTTGGCATACCTCATTTTGAAGCTTCTCCCAAGTCTCACTTTTATTGGGGCAAA  
CTGATTAATCACTTGAAAAATTAATCATTTTTTTCAGTGTAATTTTCAAAAAGTTCTGTC  
CAGCTGGCTCTGCTCACCTCTTAGGATGTGTACGGGAGAGTCTTTGGAGTTGCAGCCTT  
[C, T]  
GGGTCACGTGTGCCCTTGGCTCCAGTTAGACGTGGTCACAGCAAGTTGTGGGGTACAAAA  
TATGGCTGCCCTGGAGCTACTTATTCAGTTGGGTCTGCGGTCAAGACAGTTTTCTTAGAA  
GAGGCTGTGGGTATGGTAAGGATCGTGGTTGACAGGATTGGTATGATGTTGCTGGCTACT  
GGGGAGGAGAAGAGGAACAGCGCAAATCCAGAAGCCTGGTTCTTTGTCCTTAAGGTCTG  
GCTGGAAGAAGAAGAGCACATGCAACTCCATCGCTGAATGATCCTGAGTATCTCAGGGT

97176 AAGCTTCTCCAAGTCTCACTTTTATTGGGGCAAACTGATTAATCACTTGAAAAATTAAT  
CATTTTTTTCAGTGTAATTTTCAAAAAGTTCTGTCCAGCTGGCTCTGCTCACCTCTTAGG  
ATGTGTACGGGAGAGTCTTTGGAGTTGCAGCCTTTGGGTACAGTGTGCCCTTGGCTCCA  
GTTAGACGTGGTCACAGCAAGTTGTGGGGTACAAAATATGGCTGCCTGGAGCTACTTATT  
CAGTTGGGTCTGCGGTCAAGACAGTTTTCTTAGAAGAGGCTGTGGGTATGGTAAGGATC  
[A, G]  
TGGTTGACAGGATTGGTATGATGTTGCTGGCTACTGGGGAGGAGAAGAGGGAACAGCGCA  
AATCCAGAAGCCTGGTTCTTTGTCCTTAAGGTCTGGCTGGAAAGAAGAAGACACATGCA  
ACTCCATCGCTGAATGATCCTGAGTATCTCAGGGTGTGATCATGTCCTAACAGGACC  
CAGGCCCCATGGCAGACCACTTGTGCCACAGAGAGATGCCAGCTTAGGTTGAGGGACCCAG  
AGGAGCCTGGCCACAGCTGGTCTGGCTGTGCTTGGGGTGGCCTTGAAGGCATGGCCTGT

97768 ATGGCCTGTGGCCTTGATGGAACCTCAGAGGGGATACATCTCATCTCAGGCCAGAACTG  
AGCTCGCAAAACCTCCTTGAGCTGGAGGTGAGAGATGACCAAGCAAGAGAAACATCAGTT  
GCTACAAAATCACTGTAAGAAATGGCTTCTGAAACAGGGGCCAGCCGAGAGCTATACAGA  
AACCTTTTTTGGAGCGAGAGCTGGCTTTTCATGTCCCACTCTCACAGATGGGTTTTGACGTC  
AGAGGAGAGAACCAGCGGAAACCTTATCGAGTGGGACACGGCTGTGGCTCTAGCCTTGCG  
[C, T]  
TCAGATCCATTTTGTGACTCACCGGTAGAGGCAGAGGACAGGATCGCAAAGCTCCTGTCT  
TTCCAGAAAGGACTCCCTGGGGCTCCATGAAGAGAGCGCTCTCAGTAACATTTACACTAC  
ATTTTGTTCCTGTTTGCCTTTAAATGTTTTGTTTTCCCCAGTTCTCTTGGAGTGGGAG  
ATAAAATCTGGGTAGGGAGCTAAGTTTTGTGGTTTCTCCTTCTGCTGGAAAAATGATCTT  
CCTGAAAGCTTGATGGTCTGTTCTCAGGGAAGGCTGGGAACATTGTTGGGTAGGTCCAG

98400 GAGAGCTGACAGGAAGGTACCACCTGGACAACATGAGCTTTAGCCCAACCTGGGAATATC  
CATGCACAGTCCCTGGGGTTTGAAAGGTAATTTTTTATATAGAAATAAGCAGGAGCTCAT  
TTAACTTACCACATGGTCTTTTGGGGTCACTGGATTGTTAATATATGATGCCAACAAG  
GTGTTTTGCCAGAACCACTGTGTAGAGGGTGTGCTGTGGGCTGTTGTCTATTGTTTCA  
CAGCATTGAGGGTAAGGCAACGAGGTTCCATTGTCTGGCCATGCCACTTAACCTCTGTGAC  
[C, T]  
TTAGACAAATAGTTAATCACACTATGCCTCAGTTCTTTCAACTGTAAATGGGGATAAT  
GCTGGTGCCTTCTCATAGGGTTATTCTGAGGATTAAAGGATATAACGTACTAAATACCT  
TGGCACAGGGCCTAGCATACAGTGGGCACTAAATCATTGGTTATGATTATGAAGTATGAG

TGAGTGGACCAGATCTTTTGCCTACACTCCATATCGGAAACCAGATGTTTGTCCCTAGAG  
 CTCTGTGGTCAGTGAACACGTGCATGACTTCTGAGGTTCCCTGCCAAGGTTAGAGCAAGC

99782 TCATTTGTTGTTACTGCTGTGGTTACTCAGAAACCAGCAACTATGTCAGGTTCCCTGGTTTA  
 CAGAGTAAACCAATAGCAAGTCCTTTAATGTGCTTCTAGAGGTATGCTTTCCTTCCTTGA  
 GAAACAAGGAAGGATTACAAGATTAACACTTACCTTATATATGAGTAAGATGATTAACAA  
 GATCAGCACTTACCTTATATAAGAGTAAGATGAAAGGCCCAACAGACAGACTCTAAGGA  
 GCATGTAAATATCAAGCCTTGCTTAAACAGGATCTGGGCAAAATACATCCTAGCAGTTT  
 [A, G]  
 CATTAAACAGATTATACTGTTAATGCTATTTTAAAGCTATTTGCTTCTCACTCATGTGGT  
 TTCAGGACTTCCACAGATACTAAAATCCTCAGATGCTCAAGTCCCTTCTACAAAGTGGTG  
 TCGTTTTTGCATATAACCTACACACGTTCTTCCATACACTTAAATGATCTCTGGATTAC  
 TTAGTCATGTGCTGCATAATGATGTTTCAGTTGACAACAGACCGCATGTACAGTGGAAAGT  
 CCTGTACGATTACACTGAACCTGAAAAATTCCTGTACATAGTGATGTCATAGCTGTCAT

104080 GGGGAAATCAAGAAGGCTTCCCTGAGGAAGTGGCATGAAGGCCAAGAGCTGGTAGCTGAG  
 TAAAAGTTATCTAGAAAAAGAGAGCCAGGATAGGAGTGGGAGGAAGACGAGAGCTCTGG  
 GAGCTGAGAAGAGCCAGCATGGGTTAGGGAGTGAGGGGATACATGGGACAAGGTAATGCA  
 GTAGAGGTAGGCAGTGACTAGGTCGCTCAGAGTCCCAGTGAAGAATGTTGAGTTGATCCT  
 AAAAGCAGTGGTAAGCATCAATAGGTTGTAATCAGGGTTGTGACTTGATGAGGTTTATAG  
 [C, T]  
 TTTAAAGGATTATTCTGTTGTA AAAAATGGGGATTATGGAGGCTGAGTTAGGAACTACT  
 ATAATAACCTAGAAGAGCAACACTTGTGGTTTGGGAATAGTACAATGGTAGGCATAGGAGA  
 AATAGATGGATTCTACCTATTTTTCCCTATGTTTGAGGAGCGTTTTGATCAGATATGGTG  
 ACTTACTGGATATGGAAGTGAAAAAGGAGCTTCAGGGATACTTCCTAGATTCCTGCCTT  
 TTTACCTGGACAGAGGCACTAAACACTAATACAGGGAGTTTCGGGGGGAGGACCAGGTC

104087 TCAAGAAGGCTTCCCTGAGGAAGTGGCATGAAGGCCAAGAGCTGGTAGCTGAGTAAAAGT  
 TATCTAGAAAAAGAGAGCCAGGATAGGAGTGGGAGGAAGACGAGAGCTCTGGGAGCTGA  
 GAAGAGCCAGCATGGGTTAGGGAGTGAGGGGATACATGGGACAAGGTAATGCAGTAGAGG  
 TAGGCAGTGACTAGGTCGCTCAGAGTCCCAGTGAAGAATGTTGAGTTGATCCTAAAAGCA  
 GTGGTAAGCATCAATAGGTTGTAATCAGGGTTGTGACTTGATGAGGTTTATAGCTTTAAA  
 [G, C]  
 GATTATTCTGTTGTAAAAAATGGGGATTATGGAGGCTGAGTTAGGAACTACTATAATAA  
 CCTAGAAGAGCAACACTTGTGGTTTGGGAATAGTACAATGGTAGGCATAGGAGAAATAGAT  
 GGATTCTACCTATTTTTCCCTATGTTTGAGGAGCGTTTTGATCAGATATGGTGACTTACT  
 GGATATGGAAGTGAAAAAGGAGCTTCAGGGATACTTCCTAGATTCCTGCCTTTTTTACC  
 TGGACAGAGGCACTAAACACTAATACAGGGAGTTTCGGGGGGAGGACCAGGTCTTTTGGG

105134 TAGGCTGTTGGCTATGTTGGGCTGGAATGCATCACAGGGAACCTGGGCTGAATATGGAGAT  
 TTGGGAGTCATCAGCATGTGGATGGCAAAAGAAGCCATAAGTGGCTAAAATTGTCTGGGG  
 CAAGAAGGTAGAATCTGAAGAGAAGAAGGTCTACCACAGGGCCTGGAGAGCCAGAGCCAC  
 TGACCTCTTTCATGGGAAGGTGGATGCATTTGAGGCTGAGTCTCCTTGTCTCTTTTACAC  
 CAAGCCTGTCTGAATTCCTCAAGACAACCTCCTCCATTTGCTTTATGATCCCGGTGGTG  
 [C, T]  
 GCCGGAGCCAGTGACACTGGCTTATGCGAGCTTATTGTTAAATTTGCAGGAATTTTGTG  
 AGCCGCTTGTTTGATACTGGCCATGTTAGGAGCAATCACACATGGAAATTGTCAAATTCT  
 ACTAATCAAGGTTTTAAATTTATTTTTCCCTCTTCCTGGAGTGCTGGTTGTTTAACATTT  
 ACCAGCATATCTCCGTTTCTAACCAACTCATCTTTGCTTCTAGTGCACTTTGTGGGTTT  
 TTTCCCTTGGAAATCTGGGAGTAAGCATGATCTGTGATCATTTCTATATCTCTTGAAAG

105911 TTAGGAGTCCCTCATGAGGGCTTAATGAGGTTCTCTGCTTAGGGACTTACAAAGTTAAAT  
 CAATCGAAAGAATTCACTGCTGTGTGAGAGTAGAAGTGAAGATCCTTGCTGTATTAGGCTA  
 CTCTCACAGTGCTATAAAGAAATACCTGAGACTGAGTAATTTATAAAGAAAAGAGGTTTA  
 ATTGGCTCATGGTTCTGCAGGCTCTACAGGAAGCATAGTGGCTTCTGCTTCTGAGGAGAA  
 GGAAACTTGCAGTCATGGCAGAAGGCATAGGAAAAGCAGGCACGTCTCATATGGCCAGAG  
 [T, C]  
 GGGAGGAAGAGAGGGAGGGAGAAGGTGCTACACGCTTTTAAACAACCTGGACCTCATGAT  
 AACTCACTCATTTTCATGAACAGCACTGGGGAGTTGGTGCTAACCCATTATGAGAAT  
 CTGCCCCCATGATCCAATTGCCTCCCAACAGGCCACCTCCAACACTGGGGATTGCAAT  
 TCCACAGGAGATTTCTGTTGGGACGCAGATCCAAACCATATCACCTGCTTTCTTTGCCGAC  
 TATTAGCTAGGGGATGCTCTCTGCTCCTAAAAGTCACCTGCATTCTTCCCTTCCCGTGTG

105944 CTGCTTAGGGACTTACAAAGTTAAATCAATCGAAAGAATTCAGTGCTGTGTGAGAGTAG  
 AACTGAGATCCTTGCTGTATTAGGCTACTCTCACAGTGCTATAAAGAAATACCTGAGACT  
 GAGTAATTTATAAAGAAAAGAGGTTTAAATTGGCTCATGGTTCTGCAGGCTCTACAGGAAG  
 CATAGTGGCTTCTGCTTCTGAGGAGAAGGAACTTGCAGTCATGGCAGAAGGCATAGGAA  
 AAGCAGGCACGTCTCACATGGCCAGAGTGGGAGGAAGAGAGGGAGGGAGAAGGTGCTACA  
 [C, T]  
 GCTTTTAAACAACCTGGACCTCATGATAACTCACTCATTTACATGAACAGCACTGGGGA  
 GTTGGTGCTAACCATTATGAGAACTCTGCCCCATGATCCAATTGCCTCCCACCAGGC  
 CCCACCTCCAACACTGGGGATTGCAATTCACAGGAGATTTCGTGGGGACGCAGATCCAA  
 ACCATATCACCTGCTTTCTTTGCCGACTATTAGCTAGGGGATGCTCTCTGCTCCTAAAAG  
 TCACCTGCATTCTTCCCTTCCCGTGTGGCTCTCCATCTTCAAATTGGCAGTGGCATGTTA

105970 TCAATCGAAAGAATTCAGTGCTGTGTGAGAGTAGAACTGAGATCCTTGCTGTATTAGGCT  
 ACTCTCACAGTGCTATAAAGAAATACCTGAGACTGAGTAATTTATAAAGAAAAGAGGTTT  
 AATTGGCTCATGGTTCTGCAGGCTCTACAGGAAGCATAGTGGCTTCTGCTTCTGAGGAGA  
 AGGAAACTTGCAGTCATGGCAGAAGGCATAGGAAAAGCAGGCACGTCTCACATGGCCAGA  
 GTGGGAGGAAGAGAGGGAGGGAGAAGGTGCTACACGCTTTTAAACAACCTGGACCTCATG  
 [A, G]  
 TAACTCACTCATTTACATGAACAGCACTGGGGAGTTGGTGCTAACCATTATGAGAAC  
 TCTGCCCCATGATCCAATTGCCTCCCACCAGGCCCCACCTCCAACACTGGGGATTGCAA  
 TTCCACAGGAGATTTCGTGGGGACGCAGATCCAAACCATATCACCTGCTTTCTTTGCCGA  
 CTATTAGCTAGGGGATGCTCTCTGCTCCTAAAAGTCACCTGCATTCTTCCCTTCCCGTGT  
 GGCTCTCCATCTTCAAATTGGCAGTGGCATGTTAGATCCTTGTCAGGATTGATTCCCTT

106134 TCTGCTTCTGAGGAGAAGGAACTTGCAGTCATGGCAGAAGGCATAGGAAAAGCAGGCAC  
 GTCTCACATGGCCAGAGTGGGAGGAAGAGAGGGAGGGAGAAGGTGCTACACGCTTTTAAA  
 ACAACTGGACCTCATGATAACTCACTCATTTACATGAACAGCACTGGGGAGTTGGTGCT  
 AACCATTATGAGAACTCTGCCCCATGATCCAATTGCCTCCCACCAGGCCCCACCTCC  
 AACACTGGGGATTGCAATTCACAGGAGATTTCGTGGGGACGCAGATCCAAACCATATCA  
 [G, A, C]  
 CTGCTTTCTTTGCCGACTATTAGCTAGGGGATGCTCTCTGCTCCTAAAAGTCACCTGCAT  
 TCTTCCCTTCCCGTGTGGCTCTCCATCTTCAAATTGGCAGTGGCATGTTAGATCCTTGTC  
 AGGATTTGATTCCCTTTGACTTCTCCTCTGCCACCAGCCAGACAAAGCTCTCTGCTTGAA  
 GGGCTTGTGTCATTCTATCAGTCCTACCTGGATAACCTTTCTGTCTTTGTCATACCCGTG  
 CCTGTGTTAGTCTCCTAGGGCTGCTGTAACAAAGTACCACAAAATGGGTGGCTTAAAGCA

106148 GAAGGAACTTGCAGTCATGGCAGAAGGCATAGGAAAAGCAGGCACGTCTCACATGGCCA  
 GAGTGGGAGGAAGAGAGGGAGGGAGAAGGTGCTACACGCTTTTAAACAACCTGGACCTCA  
 TGATAACTCACTCATTTACATGAACAGCACTGGGGAGTTGGTGCTAACCATTATCATGAG  
 AACTCTGCCCCCATGATCCAATTGCCCTCCCACCAGGCCCCACCTCCAACACTGGGGATTG  
 CAATTCACAGGAGATTTCGTGGGGACGCAGATCCAAACCATATCACCTGCTTTCTTTGC  
 [C, T]  
 GACTATTAGCTAGGGGATGCTCTCTGCTCCTAAAAGTCACCTGCATTCTTCCCTTCCCGT  
 GTGGCTCTCCATCTTCAAATTGGCAGTGGCATGTTAGATCCTTGTCAGGATTGATTCCC  
 TTTGACTTCTCCTCTGCCACCAGCCAGACAAAGCTCTCTGCTTGAAGGGCTTGTGTCATT  
 CTATCAGTCCTACCTGGATAACCTTTCTGTCTTTGTCATCACCCGTGCCTGTGTTAGTCTC  
 CTAGGGCTGCTGTAACAAAGTACCACAAAATGGGTGGCTTAAAGCATTGGGAATGACTTA

107058 AAAGACCTTATTTCCAAATAAAGTCCTATTACAGGCACTGGAAGTTAGGACTTCAACAT  
 ACCTTTTTGAAGGACCCAATTCAACCCATAACAGTGCCATGTAACAAAATAGAACATAAT  
 CACATGAATGGTACTTCATCATATTCAATTGGTCCCAGGGGTTACGGCATGGAATATTGGG  
 TGGTGAGGAGGCATTTTGAATTTGCCTACCATAGTCTTCAAAGGTGCCCTTTAAATA  
 ATTGCTCATCTGCTGACTTACCTAAAAATAGATCCCATGTCATCCATGGTGCCTCCTTG  
 [A, G]  
 ATGACCTCAGTTTATACCTGTTCTCCTTCCCTCCAGTTTGTAGTATTGTCTGCCTAACAA  
 ACAGGACTTTCTCATGGACTGCACTGTTCTCCTTCCAGAGGGACAGACTCTAGAAATC  
 AGTGCCCTGAGCTGATTACGATATTTGGTACAAGACACAGTGAAAATGAAGAATCTTCCA  
 TCCTTCAAACATGACCAATTTTGTGCTCCAATCCCAGCAAAGGAAAGTTTGCTTTTGCT  
 TTTTATTTTTTTTTTCTTAAATTTGAAGGCATATAACAAATTGCTCTGCATTTTCTCT

107310 GCTGACTTACCTAAAAATAGATCCCATGTCATCCATGGTGCCTCCTTGAATGACCTCAGT  
 TTATACCTGTTCTCCTTCCCTCCAGTTTTGTAGTATTGTCTGCCTAACAAACAGGACTTTC  
 TCATGGACTGCACTGTTCTCCTTCCAGAGGGACAGACTCCTAGAACTCAGTGCCTGAGC

TGATTACGATATTTGGTACAAGACACAGTGAAAATGAAGAACTCTTCCATCCTTCAAACA  
 TGACCAATTTTGTGCTCCAATCCCCAGCAAAGGAAAGTTTGCTTTTGCTTTTTATTTTT  
 [T, -]  
 TTTTCTTAAAATTGTAAGGCATATAACAAATTGCTCTGCATTTCTCTCACATGGTTTTG  
 GTTGAAGATGTCTTCTTTCCCCAGCCGTCTGCTGTACCTCACTCTTTAGCACACTCAG  
 GCTCAGGCTGGAGTCATCTCTATGGCCACCTTGATCTGCCCTCTCTTTTCATCTTCCC  
 CAGAAGCACATTTCCCACCATGAGTGATAGCCATGTTCCATCTGCAACTGGCTAAAATTG  
 CACGGCACTTAGAGTCTCCCTTTTATCTCCCTTCCTCCAGATGTCAAGCAAATTCAAAA

108283 TGTGATTTTTGTACCCCCAAGATGACATGACACCCCTAGAGTCAGGAGGCTGGGTCTTA  
 TTGTTGCCGAGGTAAAGTTCCAGGCATATCTGGTCTAACAGGACCCATGGAACCAAAGC  
 TTTGTGTTGTTGGGGCATTCTGTGAAGAAAGGATGATGAGGCGTTCCTTCTGAGGAAGGAA  
 TTGAACCGATACCTTAGATCTCATTACCTTTGTTCAAAGGCAGAGTCAGGCAGGGTGAC  
 AGGCCCAAGTTCAGAGTTCAGTAAGCATGAGCTCCAGTCTCAATGCTAAGGGTCGTTGGC  
 [A, G]  
 TACAAAACCAGGGACAAATCAGCTAACTACTTTCTTTGTCTGCAAAATGAAAGCTCAGTT  
 TCTCTTCCAGGGACACTCAAGGATCAGATGAGTTCACAGAAATGAAAGTGTAAAGACTTC  
 AGGGAAGAGGAGGATGGTGAGCCAGGCCAGGCAATAAAAAGACTCAACGTAAGCCTTCA  
 ACTTGAAATGGGGCCAGGACATGCTCTTAGAACTCCTGCTCTACTCCTGTAGCAGAGCA  
 AATATTGATTCAATGCTCTAAGTGTTTATGAAGCGCCCTATACATCCCCAGCCTTTTCCT

109168 AGCATGTCAGAGGCCCAATCCCCAGCACAGGATTAATCAGTTGAGCCTGTGCTCAGTC  
 ACAGAAGGAATTGAAAATCATGTAAGAGTGTGCTTCACTGAAGCAAATATGAGTTGTCAC  
 TGTTATGAACAGCACATTTTCACTGAACCTAGGAGGTTGATTCTTGGGTTTGGA  
 TTTGGGGAAGCAGTTGGTAATTTCAATTTGTGCAAGCTGATACTAGACGCGCCACCCTCA  
 GAGCCCGATCACAGATTCATAGATGTCTGACTTTTGCTTAGATCCACACTCACACACTC  
 [G, -, T]  
 GTATTCCCCCTGTG  
 TTACTTACTAGGGGAATCCTACCACATCTCCAGGCACTTCCAGGACCCAGTGATGTGTG  
 TAGCCATGAGAGGGCTCTGTTCAAATGGTCAGATCCCTCCAGAGATTTGAGCTAAACCAG  
 CCATCCCAGGACATTAGACAGGGATGGCGTGAAAGCTGCTTTGTCAGATCTCCTGTGTGTA  
 GTTTTGAAACATGGTCATGAGAAGAATTGTTATTCAGTCAGTCTGCAACTGTGTGGTCG

110938 CTTTCAAGAACCTTCTGACCACTTAGTATGCGTTTCAAGCAGAACCTTCTAGATAAAAT  
 CTTTCATGCGAATTTCTTTCTGTAAACCTTCACTAAATCTGGTCTTTCTTGAGAGCAT  
 CTCCTACTTAGAAAACATTTTCTTTTGTGTTGATAACCGTGTCTATTATGCTTGCCA  
 TTTAAAGAGCAAGGGGAAAATGTAGGCAGGGCTTCTCTGGAAGCAGCAAGTTCATGCAT  
 CTGGGTCTGAATCATATTCTAAGTTTATCAGAGATGGATGTCTATGCATCATAGACTCCA  
 [A, G]  
 TCCCCAGTGCCAGGTGAGAGGGTTTCAAGCCAGTACCCCTGTCTGCCTGCGTGACCCC  
 CACAGATTCAGGATCTGATGTCCCAGAAAGAGGCCTGATGAGTGAGGATAAGGAACAAGC  
 CTCAGGAGCTGCCTGAGCTTGGGCTGAAGGGGATGCAGAGGCTTCTCCTGCCCCCTCAGGC  
 AAACAACAGCAAAAATACTCTCAGCAGCTATGGCTACCACTTACTGAGCATGCACTATGT  
 GTTCAGCAGTGCTCTATGTATATTATTCTGATTTCCCCAACCCCTCTATGAGATAGGCTT

111713 AGCTAATGCTGTGGTAGACCCATTGCTTCAGAGCTGGGCACCGTGGGCAGTGCCAGTGAG  
 GATGGGGCCAGGGGAAGAGATTTCTGGTTCTTTGTGTCAGTATAAGTATGTTTATAGCACG  
 GCACCCATGAAGGAACAGCAGACCCCTGGGCTGAGGTGGGCAGAGGCTCTTGGGGAGCCCA  
 GGTACCCCTAGGGGACAAGTGAGGGAAGAGGATTGGGGTAGGGCTGGCTAAGACCAGAAG  
 ATGGGCGGGAGGCAGTAAGGGGGAGTCAGGGCTTTGGGCAGTCCAACCTGGACGTACAGGG  
 [G, A]  
 GGACAAGAGCAAGACTAGCTGCTGAGTGGGAGAGGGCGGGACAGTGGCTTACGATGGCTT  
 GGTGGGGAAAGACTGGCAGTGACGCTGGTTGCAAGTGGTTGAGCGTCCCTTAGAACCT  
 CCCTCTGGGACAGCCCCAGTCTCAGAAATGGGGCAAAGGCAGGGGAAGAGCAGGCCAGGA  
 TCACCTCCCTCACTGTCTCGTGTCCGCATTTCTATGGAGCCTCCCATGACATTCATCA  
 TGGGGCATCTGCGAGGGTATTGTGGCCAGAGATACCACGTGAGGAATGCAGGAGCCTCC

113984 TTCACTTTCCATGTTGATAAAAACATTTGCATAAGATGCCTTAAATGCAAGCCGGTGCC  
 CCTCTGTGTGCCAGAGGATGTGCTCAAGGTGAGAGTCTCAGGAGCGGGGTTTCTCTCAGC  
 ACACCCGGGCCACAGGCCCTCTTCTGTAAATGTCATATTGAAATAAATGTGCACATAAA  
 CCAGGTCATACTCTTCAAAGGGATATCAGGATTTACATTTTCTCACATACAGTTTAGCC  
 CCATGGAATTCAGACTAAGTTGATCAAAACCTATGATAGGAATCCCAGAAGGTCAAAGA  
 [T, C]

GCAGTTGTTGAACATTTTATCTTCAAAAATTACTGCCTCTCAGTGTATTCTGTGGTGGCA  
GGATATCCAAAATGCCTGAAAATGTGCTTTCAGCGCAGGACTCCGTTTGTGTTAATGTC  
TGCTGGGGACATTAGTAACAACACCAGTGATTTCAGTGAGCTCACTCCTGTGTGATGCTAG  
ACTTGGAAAGCTTTTAAAGGAAATTAAATTACACATTCATACAACACAGTGTGTAAGGAA  
AAAAAAGATATCACAAGTATCATCTTAGGCAGGATAACATAGTGTTAAGGCCCCAG

115302 TGGGCTGCACAATACAGAAAGGATTCTACTTAAGGCTGAGACCTGGGAGGACTGCCCTC  
TCTGTGAAAATGGGGACTAAGAAAATTTTACCTAATGGTCAAGGAATGTGGCAAGTAGCT  
TGTGGTCTGCCTAGACTTTGAACCACATTGAATTTACACTACTTACACGTTACAGAAATT  
CTAAACCTAGAAAATAAACTTAAAGATAGGTCCCAGATCAGTAAAACCACTAGAGCTCCTA  
GAGAAAATACATGCAAACCCATTATAAAGGACAATCTCCACACCAGAATATACAGGATGCC  
[G, T]  
ATGGGAAAAAGAAAATCTCAACCTACAACATAAAATTGCAGATCATAAGGAACATAATTTG  
CCATCGGGAAGAGTTAACCCCAGACTCACACACTGGGGTTAGCTCCTTCAGAAATCTTCAC  
GTAATAAACACAATGTAAGTAAGTATTTAAAAATCTATGTTTGAAATTATTAGAATA  
ATAAAGAAGAGAATTATAAAGAAGGAATTGTAGGGGAAAAACAAGCAAATTTGAAAA  
GTAGAATTTCTAGAAATTAACATTATTTAAATTAATAATACAATAAATGATTTAAAAACA

115352 GACTGCCCTCTCTGTGAAAATGGGGACTAAGAAAATTTTACCTAATGGTCAAGGAATGTG  
GCAAGTAGCTTGTGGTCTGCCTAGACTTTGAACCACATTGAATTTACACTACTTACACGT  
TACAGAAATTTCTAAACCTAGAAATAAACTTAAAGATAGGTCCCAGATCAGTAAAACCACT  
AGAGCTCCTAGAGAAATACATGCAAACCCATTATAAAGGACAATCTCCACACCAGAATAT  
ACAGGATGCCGATGGGAAAAAGAAAATCTCAACCTACAACATAAAATTGCAGATCATAAG  
[G, T]  
AATAATTTGCCATCGGGAAGAGTTAACCCCAGACTCACACACTGGGGTTAGCTCCTTCA  
GAATCTTCAGTAAATAAACACAATGTAAGTAAGTATTTAAAAATCTATGTTTGAAAT  
TATTAGAATAAATAAAGAAGAGAATTATAAAGAAGGAATTGTAGGGGAAAAACAAGCAA  
ATTTGGAAGTAGAATTTCTAGAAATTAACATTATTTAAATTAATAATACAATAAATGA  
TTTAAAAACATATTAGGTACAGCTGAAGAGAGAATTGTTGAACAGGAAGATAGCTCTGAA

115804 AGAAGGAATTGTAGGGGAAAAACAAGCAAATTTGGAAGTAGAATTTCTAGAAATTAAC  
ATTATTTAAATTAATAATACAATAAATGATTTAAAAACATATTAGGTACAGCTGAAGAGA  
AATTTGTTGAACAGGAAGATAGCTCTGAAATTACTCAGGAAGAGCTCAGAGAGACACAA  
AGATAGAAAATATAAACAGATATTAAAGAGAAAATATTAAGATATTGAAATATTAAGAAA  
TATTGTTAAAAGATATTATTAAGAGTTTTGAAGAACAAGTAGGGTAGTCTATAAGAAAAG  
[C, G]  
GTAGAGGAAGTGAGGGAGAAGAAACACTGGAAATGATAATAGCTAGACCTTTTCCAAAAT  
TTTTTTAAAGATATAAATGCCTAGATAAAAGCAGCACTCCAAATCATGAACAGTATAAAT  
ACAAATTATGTTACAATGATCTGCAGAATACCAAAGATAAAAAGTGACCAAAGAAGAAA  
AAAGATTCTCTGCAAAGGAACAATTTCTAATTGCAAACCTCATTAGCAACAATGGAAGCC  
AGAAGGCAATTGAATAATATCTTCTAAACAATGAGGTAAAATAGTCAACTTAGAATTTCTG

115862 ACATTATTTAAATTAATAATACAATAAATGATTTAAAAACATATTAGGTACAGCTGAAGA  
GAGAATTGTTGAACAGGAAGATAGCTCTGAAATTACTCAGGAAGAGCTCAGAGAGACAC  
AAAGATAGAAAATATAAACAGATATTAAAGAGAAAATATTAAGATATTGAAATATTAAGA  
AATATTGTTAAAAGATATTATTAAGAGTTTTGAAGAACAAGTAGGGTAGTCTATAAGAAA  
AGCGTAGAGGAAGTGAGGGAGAAGAAACACTGGAAATGATAATAGCTAGACCTTTTCCAA  
[A, C]  
ATTTTTTTAAAGATATAAATGCCTAGATAAAAGCAGCACTCCAAATCATGAACAGTATAA  
ATACAAATTATGTTACAATGATCTGCAGAATACCAAAGATAAAAAGTGACCAAAGAAGAA  
AAAAAGATTCTCTGCAAAGGAACAATTTCTAATTGCAAACCTCATTAGCAACAATGGAAG  
CCAGAAGGCAATTGAATAATATCTTCTAAACAATGAGGTAAAATAGTCAACTTAGAATTC  
TGTTTGAGAGTGAAGGGCAAAGATACTCTCTGATAAAGATTTAAGAGGTTACTGAAGAGG

118203 ACCCATACACTTGGAACCTTAAAAACATATTTTGAATAACTCAAGGATCAGAGAATAGG  
TCCTAACTGAAATCGCTGAAAGTTTAGAAGCAAGCAATAATGAATTCCTACATATTTCAA  
GTATATAGGATGCTGTAAAGCAATACTTGGAGGAAAAGTTATAGCCTTCAGTATAATTT  
TAGAAAATTAGAGCCAGTAGTTTCATCTCAAACCTTTAAAAATAATAAAGAAAAGAGCGTGC  
CTTAATAGAAAATAAAGAAGCAATAGTGAGGATCAAGAAAATCAAATCTGGCCCCCTGG  
[A, -]  
AAAAAAGAACTTTTAAATTTGTCAAACCTCTGACAAGACTGGCAGTAAACGCTTATG  
TGCCAGAGACTGTTCTATGTGAATTATGTTTAAATTCCTCAAGGTCAAATGACCTAA  
GAAGTAGATCAGTTTGTATTATTTTACCACACAGCTACTAGTACTCTGTGACACCTGA

ACAAAACTTCTATTGTAGGACATTCCGGCATTTCATGGCACCCCTGCAGATTTAAAA  
 AAAAAAACAATGAGGCAAAGATGGGAGACTTATGAGGAAAATACATGTAAACCAGAGC

124933 GTGGACATTCTCGCTTGGAGGCCCTGGCAGGCTGCAGGGAGGAGCCACAGACAGGAAAGCC  
 TTTATAGCCAGCACCTCTGTAGTGCAGAATGCTGGGCAAGGCCCTGGCCCTGGGTGAGAGC  
 CAAGGAGGCAGCCTGGGAGCTGTATAACAGAACTGGCAGCAGGAAAGGATTTTATTTCTCT  
 GCTGAGCATGTTCTGCCCTACCCAGAGGCCCTACCTGCCCTGGAGACCTACTGATGTC  
 TCCCACTACCATGTCCCGCCTGTGCCTTACTGAAACACAAAGACTTATCATGAGAAGCTC  
 [C, T]  
 GAAGCACAAAAGGAAAAGGCTGGATCATGACCTGGCCTTGGCCTCCAGGCTAAATAATG  
 AGGCAACTCTGAAGCCAGTGTGAGGGTAAACTGTGATGAAAGAATAGATGATAACTAG  
 CCCATCCACGGGGGACTGGAGTGCCTTAAATGGTCAGGCTTTAAAGAGGGTCCAGTCAG  
 AGCCCCAGCCAGCTTATCCTAGCCCTTTTATTGGGATGGGTGCTAGGAATGGGCTTCTGC  
 AGTCCACACACATGTAGGGGCATGTACACTTGCATCCCTGAACAAGGCCGGCCTTCTGTC

126402 ATTTCTGTGAACCTTTGAGGGCCTGCAACAACCATGGCTGAGCCCAGACTAACCTCTGGG  
 CAGCCCCCTACCTTGCCAGTTATGTTTCATGGGAGCCTGATTATTTTAAACAGATTCTCC  
 TATTGTTTCAGTTGCTTGTAGTAAATGTTGCTCTGCAGCATTGATGCTAGGGTAGTGCCA  
 GCCAGAAACCTGTGCAATGCTCAGATCTGGCTCTTGGCCCAGGATAGTCTGGATTATCA  
 GACTGGGTTTATTTTCTTGGCATTGCAGTCTGGCTTCTGATTATCTTTCAAACACACA  
 [C, T]  
 TTGCATGGCATTTCCTTCCATACTGAGCAGATTCCATCAACAGTCTTGGGATTCCACTTT  
 TCCTTTGCAATATGGACGTTTTTGCATCAGTTTGCATTAGCTGTTAGTGAACTGGCACT  
 GCATCTGCAGGCAGACATCGCCAGACCGCAGCACAGTTTATCTTCAGATGTTTTCTTTTT  
 CCATGTTGGTGGCAGCTTCCTTTGCTCCTTCCCTCCTTCTCAAGATAAATCCCCAAAGC  
 TTGGACCCAGCACTTTCTGCCTATTCTCATGGTTTTTGTGGGGTATGAATGCCTTAGAT

127387 GCGCAATCTTGGCTCACTGCAACCTCTGCTTCCCAGGCTCAAGTGATTCTCTGCCTCA  
 GCCTCTCAAGTATCTGGAACATATAGGTGTGTGCCACCATGCCACCTAATTTTGTATTT  
 TTAGTACAGATAGGTGTTTTGCCATGTTGGCCAGGCTGGTCTCAAACCTCTGGCCTCAAG  
 TGATCCACCCACCTCAGCCTCCCCAAGTGCTGGGATTACAGATGTGAACCACCGTGCCTG  
 ACCAATGCTTGATAGCTCTTGAATGATCAGTCTCAGAAATAAACTTGCAATCCAGATTA  
 [T, A]  
 CGCCAACCAAGAGTTAAACATCTCAAGGCCAGAGAGCAACATGCTCACTGCTCATGGAGT  
 CACATGTACTGACCTCAGGACATCCTTGGTAAACAGCGCAGTGCACAGCCCCCTGGCAGGC  
 TAGCTTGTTAGGGCTTATTAGGCCAACAGCCACGGTCCCTTCCAGCCTGGGTCCACTGG  
 AACCCAGCGGGTTACTCGGACCGCTGCTATGTCATGGGCTGGCCTGCCTTCTCCACACA  
 CGGGGCCGTAAATGTGATGTGCGGCACCTGCTGTTGGTGTGGGAGCTGCTCTTTTCTT

128453 CAGTGCCGAGGATGACCATGAAGCACTTTGGTGGTATTTTAAGTGCCCTCGGTTTCTGCG  
 AGAAACTCAAATAGTAGTAATGGCAAATATTTACATATGGCTTATTCTGCACCAGGTACA  
 GGTCTCATGGTGAAAGGTTAATATTATGGTCCCGATTTTGCAGATGAGGAAACGGAGGCT  
 TACAGAGGTGAAGTAATTTGCCCAAGGGCATCAGGCCAGTTAGTGGTGGAGCTGAGATTT  
 GAACCCAGGCAGTCTGGCTCCAGCCTGTGAGTCCCTCCCCATCTGCCTACTGCATGCGGG  
 [G, A]  
 GTGGTATGACCAGCAGGGTCAACTTCGCCTGGGGTCCACATCTGCCTTTTCTCCCTTGCAT  
 TCGGTGTTAGGTCCTGTCAAAACATTGTCCCATTTGGATCCTTATAGGGAGGGTAGAGTG  
 TCCCCGTCTTTTCTAATTTTTTGGAGTTTTTATTCAATTTATTTTGTTTAAGCAGATAAA  
 AGACACATTAGCCACACTGCTGTGCATTTCCCAAAGACCACAGGAAAAAACTCAAAAC  
 TCATGGCATTAAACATAGTATTTTCAATTTCTAACAGCTTTATTGGGATATAATTTACATGC

128584 GAAAGGTTAATATTATGGTCCCGATTTTGCAGATGAGGAAACGGAGGCTTACAGAGGTGA  
 AGTAATTTGCCCAAGGGCATCAGGCCAGTTAGTGGTGGAGCTGAGATTTGAACCCAGGCA  
 GTCTGGCTCCAGCCTGTGAGTCCCTCCCCATCTGCCTACTGCATGCGGGGGTGGTATGAC  
 CAGCAGGGTCAACTTCGCCTGGGGTCCACATCTGCCTTTCTCCCTTGCATTGCGGTGTTAG  
 GTCCTGTCAAAACATTGTCCCATTTGGATCCTTATAGGGAGGGTAGAGTGTCCCCGTCTT  
 [T, C]  
 TCTAATTTTTTGGAGTTTTTATTCAATTTATTTTGTTTAAGCAGATAAAAGACACATTAG  
 CCACACTGCTGTGCATTTCCCAAAGACCACAGGAAAAAACTCAAAACTCATGGCATTAG  
 ACATAGTATTTTCAATTTCTAACAGCTTTATTGGGATATAATTTACATGCCAGAAAACTGA  
 TCCATTTTATGTACAAGTCAATGATTTTTTGGTCTGTTTGCAGAATTTTCTAAAATTAGTT  
 TGTCACTACAATCTAATTTTAGAACATTTTCATCACCTGCAAAAGAACTTGATGCCGAT



128680 GGAGCTGAGATTTGAACCCAGGCAGTCTGGCTCCAGCCTGTGAGTCCCTCCCCATCTGCC  
TACTGCATGCGGGGGTGGTATGACCAGCAGGGTCAACTTCGCCTGGGGTCCACATCTGCC  
TTTCTCCCTTGCATTGCGGTGTTAGGTCTGTACAAACATTGTCCCATTGGATCCTTATA  
GGGAGGGTAGAGTGTCCCGTCTTTCTAATTTTTTGGAGTTTTTATTCAATTTATTTTG  
TTTAAGCAGATAAAAGACACATTAGCCACACTGCTGTGCATTTCCCAAAGACCACAGGAA  
[A, -]  
AAAACCTCAAAAACATCATGGCATTAAACATAGTATTTTCAATTTTCTAACAGCTTTATTGGGAT  
ATAATTTACATGCCAGAAAACATGATCCATTTTATGTACAAGTCAATGATTTTTTGGTCTGT  
TTGCAGAATTTTCTAAAATTAGTTTGTCACTACAATCTAATTTTAGAACATTTTTCATCAC  
CTGCAAAAGAACTTGATGCCGATATCCAGGCACCCCATGCCACCCAGCCCTAGGCA  
ACCCCTAACTCACTTTTTGTCACTGTACTCTTGCTCCTCTGGGCATGTCTCACATGGAC

129116 AAATTAGTTTGTCACTACAATCTAATTTTAGAACATTTTTCATCACCTGCAAAAGAACTT  
GATGCCGATATCCAGGCACCCCATGCCACCCAGCCCTAGGCAACCCCTAACTCACTT  
TTTGTCACTGTACTCTTGCTCCTCTGGGCATGTCTCACATGGACTCATACAAATGTGT  
CACTTTGTTTCTGACTTTCTCCACTGGGCACAGTGTCTTGAGGTTCTTCCATGTTGTG  
CATGTCTTTTGGTTGCTGAATCATATTCCATCACATGTGCCACATTTTGTGCATCCGTTT  
[A, G]  
TCGGCTGATGAACATCTTGGTTGCTTCCACTCTTTGGCTATTGTATTACCCTCTTTAGAT  
GGAAAAGAAGATGCATCCTAGAGAAGTCTTACGGCCTCGGTATAGACATCATCAGTGGAG  
TCTGGTGGCCAGGCCGGTGCCTTCTGGTTGATTCACTCAAAATAGGTGTGCAAACTGA  
CACCTATTTACTCCTTTTTTGTGCCAGCACTGGGCTCAGCCCTGGGAGCCCTGCAGCAA  
GTAAGACGCACATGGTCCCCGCCCTCATGGGATTGTATGCAGGCAAGCAGTAAGTGAGC

129549 AGGCCGGTGCCTTCTGGTTGATTCACTCAAAATAGGTGTGCAAACTGACACCTATTTACT  
CCTTTTTTGTGCCCAGCACTGGGCTCAGCCCTGGGAGCCCTGCAGCAAGTAAGACGCACA  
TGGTCCCCGCCCTCATGGGATTGTATGCAGGCAAGCAGTAAGTGAGCAAAATCAAGGCAG  
GTGAGTGTTAGGTAGTGATGAGTGTCTGGGAAGGAAATCAAATAAGATAATGTGGAGACAT  
ATAATAAGGACTTTAGAATTTTCTGCTTTTTAATTTTAGTTAACTTCTCTCAATTTCT  
[A, C]  
CCCGGCAGTAGACATTTCTATTTTACTTTAAAGAATTATCCAAATACATTTCACTTTACAT  
GGAAAATGTGCAAAAGATTTGAGAGGTGAGAAATCATTTTTATCTGTATGCTTTAGGGACT  
GAGACACTGCTGTGGATGGGGCGGCTTCTCTCCATACTTTGTGGGGTCACTGAAGGACTC  
CTCGCTTCCCTCTGCCACCCCTGCCTAACAAGGCACCCTCCTTTCCATTTAGCAATCCCG  
GTCATCGCAGAGGCCCTCAATAGCCCCAAGCAGAACTGCACTCGTGTGTGAGCAAAAT

129820 TAATTTTAGTTAACTTCTCTCAATTTCTACCCGGCAGTAGACATTTCTATTTTACTTAA  
AGAATTATCCAAATACATTTCACTTTACATGGAAAATGTGCAAGATTTGAGAGGTGAGA  
AATCATTTTTTATCTGTATGCTTTAGGGACTGAGACACTGCTGTGGATGGGGCGGCTTCTC  
TCCATACTTTGTGGGGTCACTGAAGGACTCCTCGCTTCCCTCTGCCACCCCTGCCTAACA  
AGGCACCCCTCCTTTCCATTTAGCAATCCGGGTCACTGCAGAGGCCTCAATAGCCCCAAGC  
[A, T]  
GAAACTGCACTCGTGTGTGTGAGCAAAATTACCCAGTTATCTGGCCATGTAGAAAGCTAC  
AGTTTTACTCTTCATGAAAAATTAAATCTTGTCTGATCTGATGTAAGGAAAAGGATGA  
GGCAACTTGGAGGAACCTCAGCTATTGTTGATCAGGCAGATGATAAACTACATTTTCTT  
GACTCAGGGGATCAATGGAGAATCTTAGAGAGAACTCACAGAAGAAATTAAGATTAAAT  
TTGCAAGCCTGTAATATGGGAATGCATTCTAACAACCTACAGCAAAATAAGGCTCTCTCC

129934 GTGAGAAATCATTTTTATCTGTATGCTTTAGGGACTGAGACACTGCTGTGGATGGGGCGG  
CTTCTCTCCATACTTTGTGGGGTCACTGAAGGACTCCTCGCTTCCCTCTGCCACCCCTGC  
CTAACAAGGCACCCCTCCTTTCCATTTAGCAATCCGGGTCACTGCAGAGGCCTCAATAGCC  
CCAAGCAGAACTGCACTCGTGTGTGTGAGCAAAATTACCCAGTTATCTGGCCATGTAGA  
AAGCTACAGTTTACTCTTCATGAAAAATTAAATCTTGTCTGATCTGATGTAAGGAAA  
[A, G]  
GGATGAGGCAACTTGGAGGAACCTCAGCTATTGTTGATCAGGCAGATGATAAACTACACAT  
TTTCTTGACTCAGGGGATCAATGGAGAATCTTAGAGAGAACTCACAGAAGAAATTAAGA  
TTAAATTTGCAAGCCTGTAATATGGGGAATGCATTCTAACAACCTACAGCAAAATAAGGCT  
CTCTCCTGAAAATGCATTATTTATCCCCGCTGTTACCACAGCTACGGATGCTCCTTCTT  
GTGGTCTGAACCCGAGTGGGTTATGGAAGCAGTCCAGAGACAGACGACTTGCTACCAAT

132304 AAAATTCACAGAACCATTCTCCACAACAACCTTCTCTAAGCTTTCCCATCATGCAT  
GAATATTTACACCTGCTTAAATGCTGGGGATTGGAGGAACAACTTTGTTCTCAGTCTT  
AAATTTCTGAGAGCTATGAAAGCATTGGTATAACAATGTGCTGCTAACTGAGGGCCT

TGACCAGTGTTCATGTCAAGCCCATGTCAGCCATGCATGAAAACCAAACTGCAATGTGGT  
 ATACACAAGACAAGGCGGTCGAGGGGCCATAAGCTCGTTGCCCAAGATGTAGCACTCACT  
 [A, G]  
 GCCGCCCAGTTCCTTCATCTTTTGTAACTGAGCTTAATGGAATTTGCCTCAAGCTGAAT  
 GACAGAGCCTCCAAAGGTTTGGAGACTGATTCATTTGGTTTAGCTGTTTCAGCAAGCCTC  
 TTATCCGGGAGTGATGATCTCATTTTTGCCCGTTTTTGGCCAGCAGCCTCTCTCTTCAC  
 ACCTTTCTGCTGGCCTCAGCACCTTTCTTTGCCTCTGCTACTTTCCTTTTCTCTCGTCTC  
 CCTCCTTTCTGAACTTTGCTTCTGCTGTGCACCCCTCACCCACCTTACCCTCCTGCCAC

133008 CTCTCACACACGCGTGAGAGCAGGGTAGCAGAGGTGGCTCACGAATGCAGATTCACCTCAC  
 AGGCAAATTTGTGAAGTAGCGGGGAGGGCTGATTATGCAGACCCTCCAAATTCATCTC  
 CCAGTTTATGTTATCACAGGAGCTCATGATGGAAGCACCACCCGATAATTCGACTTGCC  
 TATTACTTATTCTTTATCTAGAGGAAATAAGAGAAACAATTACCTTGGTGTGACATTCT  
 GCCATCTCTACAAAGCCACCTGCACCTGAGACTTTGCCAGCAGCAGAAATAACGAGTTAA  
 [A, G]  
 TGCTAAATATTTTCATAGAGAAGAGAGTAGCAGGGCTATTGAAAATAAATTCAAAAGACCT  
 TCATGTATTCTGGTCATATATCCCTGGCATAAAACCTTCTCCAGAGATAAAATAGCTTTCT  
 GACAGGAGGGTTGTGGCAGGGGAGGGGAGGCACGGTACAGGGAACAGGGAAGGCAGCCC  
 TGGAAAACCTCCTGGCCTCCCCGTTCCACGGTCGGACGCCGCTTTGTGAAAGCATCT  
 TTGAAATGATTGAGGTTGAACTATTACTGCAGAGCCCTTTCAATAATGAATTTTAAATT

133347 TGAAAATAAATTCAAAAGACCTTCATGTATTCTGGTCATATATCCCTGGCATAAAACCTTC  
 TCCAGAGATAAAATAGCTTTCTGACAGGAGGGTTGTGGCAGGGGAGGGGAGGCACGGTA  
 CAGGGAACAGGGAAGGCAGCCCTGAAAACCCCTCCTGGCCTCCCCGTTCCACGGTCGGA  
 CGCCGCCTTTGTGAAAGCATCTTTGAAATGATTGAGGTTGAACTATTACTGCAGAGCCCT  
 TTTCAATAATGAATTTTAAATTATAAATGACATTTTGGTGTGTGCCCTTCTCTCCACCT  
 [A, G]  
 TTGGTAGTTAACTGGGAAAATTGATGTGGTTTTTGTGACGGACGGAGCAAATTCGCGGAA  
 CAGGAGCCTGAAGCTTAGTTTTAGTTCCTAACTGAGACATGTGACGGACGTCCAGCTCCC  
 CTGCTTCCCATACTTAAATGCCTGCCCCGGCCATGTCTGGGGCCAGCCTGGGCTGCACA  
 CGAGGCTCACAGCCTGCTTGTGACACATGAGCTGAGGCATTCTTTTTATTCTCTCTCTG  
 CTGAGGACAGCCTTTGGGAACCTAACATTAGGATGACTTCGGGGCCACGGAATGACTTGG

133374 TATTCTGGTCATATATCCCTGGCATAAAACCTTCTCCAGAGATAAAATAGCTTTCTGACAG  
 GAGGGTTGTGGCAGGGGAGGGGAGGCACGGTACAGGGAACAGGGAAGGCAGCCCTGGAA  
 AACCTCCTGGCCTCCCCGTTCCACGGTCGGACGCCGCTTTGTGAAAGCATCTTTGAA  
 ATGATTGAGGTTGAACATTACTGCAGAGCCCTTTTCAATAATGAATTTTAAATTATAAA  
 TGACATTTTGGTGTGTGCCCTTCTCTCCACCTATTGGTAGTTAACTGGGAAAATTGATG  
 [T, C]  
 GGTTTTTGTGACGACGGAGCAAATTCGCGGAACAGGAGCCTGAAGCTTAGTTTTAGTTC  
 CTAAGTACGACATGTGACGGACGTCCAGCTCCCCTGCTTCCCATACTTAAATGCCTGCCC  
 GGGCCATGTCTGGGGCCAGCCTGGGCTGCACACGAGGCTCACAGCCTGCTTGTGACACA  
 TGAGCTGAGGCATTCTTTTTATTCTCTCTCTGCTGAGGACAGCCTTTGGGAACCTAACA  
 TTAGGATGACTTCGGGGCCACGGAATGACTTGGGTTTCCCCGGAACACTGTGAGGCTGA

133636 CTCTCCACCTATTGGTAGTTAACTGGGAAAATTGATGTGGTTTTTGTGACGACGGAGCA  
 AATTCTCGGGAACAGGAGCCTGAAGCTTAGTTTTAGTTCCTAACTGAGACATGTGACGGA  
 CGTCCAGCTCCCCTGCTTCCCATACTTAAATGCCTGCCCCGGGCCATGCTCTGGGGCCAGC  
 CTGGGCTGCACACGAGGCTCACAGCCTGCTTGTGACACATGAGCTGAGGCATTCTTTTT  
 ATTCTCTCTCTGCTGAGGACAGCCTTTGGGAACCTAACATTAGGATGACTTCGGGGCCAC  
 [A, G]  
 GAATGACTTGGGTTTTCCCCGGAACACTGTGAGGCTGAGTTCCTCCCATGGGTGTTGGGAG  
 CACCGGGAGGAAGTGGGTGCCATCAATTAAATACGGGCTCGTTTCATGAGATACTTAT  
 CAGTCAAACTGCAAAAGCAGTTGCTGTTTGTCTTACTGCGTTTAAAGGAAGCTGCTAAGAC  
 AGAGGAGAGATAATTTAAGAGTAATCATTGGTGAGCCAGTCCTTTCCACTGACCCTGGTG  
 CTCGGAGTTTTCTCTCATTGCATCAACCATTTTTGGCAATTAGATGTGCTTTCCTTATTA

134315 CACGAAAGCCATGGAGTTTTGCCCATCCTTGAGCACAGAATGCCTTTAATGACAGCTACA  
 GAATAGAACCATTAAACAGAAATGAGCAAACTCTGGCATTTCCTACTGGCCTGTGCATTTT  
 TCAGTGCATGATGGAGCTAGGACACTCCTTTCACGGGGGCTACAGATGAAAATGCCAG  
 CCTGAACCTGTGTTCCGGGGGGTGTGTGCTCTCTAGCTGGGCACTGGCACTTGCAGTTC  
 TCAGCAAGAGCCTGGCCCTGTCTCCCGTTTGTTCATTCTTGGGCAGCATGCGTGGAGGAC  
 [A, G]

TGATGAGAGAGGGTGATGCAGGGGTCAAAAACCTGGGGCATGGAGGGATTGTGTGAATGTC  
 CCATTCCCTGGTTATTAGGCACCACCTGTATGCAAGAGGCCACCCAGATGCTGCACTCC  
 CCATGTCTCAGCTCCCCCTGAAGATGAGCCTAAGGTGGAAAGAAAATACAGCAGCGGGAG  
 TFGAGGTGAGATTTAGAATCTGTTTTCTTTACTGTGGGTTAGATCATACCATCCCTGTAG  
 CAAGATGACATGGTTTGGCTGTGTCCCCACCCAAAATCTCATCTTGAGTTGTAATTCAAA

136612 ATATTTGAAAATGCTTTTCACTTGTACTTGTACTTGATTGACAGATCGGCTGGATATAGA  
 ATTCCAGGTTGAAATTTTTTCTTCTAATAGTCAAGATAGTATAACTGCTATATAACCCCC  
 AAATATCAGTAGTATAATACAGTTTATTGTATACTCACAGCACAGCCTGCTCATTCCCT  
 GATGGAGTGCAGGAGTTCTCTGCTCCACACGGTAATTCTGAAACCAGATTCTTCTATAG  
 TGTGGCCCCAAGGTCACATGGAACAAGGATGAGAGGGAGATTGAAAGAACATGGAAAA  
 [A, G]  
 GCCCAGCAGCTCTTAAGTATCCAGCCCAGAGGTGACGTATCATTCTACTCACACCCTGT  
 ATGTGAGACCTAGTGAATGGCCCCCTCTAGAGCAAGGGGGATGAAAAGTGTAGTGTTAA  
 CTGTGTATCCAGGAGAGAAAAACACACCGTCATACTTTTAAAGGCATCATCTTAAAGCA  
 AGCAGTGTCAATTGGTAAAAAGTCCAATGCTAGACTGATCCTTATTCTTGTGGGTGACCC  
 ATTTAATCTATCTGGAAGCTATTAGGATCATCCCTGTGTTAGTCCACTGAGGCTACTATA

136839 ATTCCTTCTATAGTGTGGCCCCAAGGTCACATGGAACAAGGATGAGAGGGAGATTGAA  
 AGAACATGGAAGAGGCCAGCAGCTCTTAAGTATCCAGCCCAGAGGTGACGTATCATTC  
 TACTCACACCCTGTATGTGAGACCTAGTGAATGGCCCCCTCTAGAGCAAGGGGGATGAA  
 AAGTGTAGTGTTAACTGTGTATCCAGGAGAGAAAAACACACCGTCATACTTTTAAAGGC  
 ATCATCTTTAAGCAAGCAGTGTCAATTGGTAAAAAGTCCAATGCTAGACTGATCCTTATTC  
 [C, T]  
 TTGTGGGTGACCCATTTAATCTATCTGGAAGCTATTAGGATCATCCCTGTGTTAGTCCAC  
 TGAGGCTACTATAACAAAATCGCATAGCCTGGGTAGCTGATAACAACAGAAATTTAAAA  
 TTTCCGTGGCTGAGAAGTCTAACATCAAAGCACTGGCCAAGTCAGAGTCTGGTGAGGGCC  
 CACTTTCTGGTTCATAGATGGCACCTTTTCACTGTGTCTCACATGGCAGAAGGGGCAGA  
 GGCCTCTCTGGGTCTCTTTTATGAGGGCACCAATCCCATCCATGAGAATTCCACTCTCC

136964 ACACCCTGTATGTGAGACCTAGTGAATGGCCCCCTCTAGAGCAAGGGGGATGAAAAGTG  
 TAGTGTTAACTGTGTATCCAGGAGAGAAAAACACACCGTCATACTTTTAAAGGCATCAT  
 CTTTAAAGCAAGCAGTGTCAATTGGTAAAAAGTCCAATGCTAGACTGATCCTTATTCTTGT  
 GGGTGACCCATTTAATCTATCTGGAAGCTATTAGGATCATCCCTGTGTTAGTCCACTGAG  
 GCTACTATAACAAAATCGCATAGCCTGGGTAGCTGATAACAACAGAAATTTAAATTTTC  
 [A, G]  
 GTGGCTGAGAAGTCTAACATCAAAGCACTGGCCAAGTCAGAGTCTGGTGAGGGCCACTT  
 TCTGGTTCATAGATGGCACCTTTTCACTGTGTCTCACATGGCAGAAGGGGCAGAGGCCT  
 CTCTGGGGTCTCTTTTATGAGGGCACCAATCCCATCCATGAGAATTCCACTCTCTGACC  
 TAATCACCTCCCAAAGGCCCCACATCCTAATACCATCACCTTGGGGGTAAAGATTTCAAC  
 ATATGAGTTGAGGGGGACACAGCATTTGGGACCAGAGCAATCCCTTCATGAACCCTTTAAG

137136 TTCCTTGTGGGTGACCCATTTAATCTATCTGGAAGCTATTAGGATCATCCCTGTGTTAGT  
 CCACTGAGGCTACTATAACAAAATCGCATAGCCTGGGTAGCTGATAACAACAGAAATTT  
 AAAATTTCCGTGGCTGAGAAGTCTAACATCAAAGCACTGGCCAAGTCAGAGTCTGGTGAG  
 GGCCCACTTTCTGGTTCATAGATGGCACCTTTTCACTGTGTCTCACATGGCAGAAGGGG  
 CAGAGGCCTCTCTGGGTCTCTTTTATGAGGGCACCAATCCCATCCATGAGAATTCCACT  
 [C, T]  
 TCCTGACCTAATCACCTCCCAAAGGCCCCACATCCTAATACCATCACCTTGGGGGTAAAG  
 ATTTCAACATATGAGTTGAGGGGGACACAGCATTGGGACCAGAGCAATCCCTTCATGAAC  
 CCTTTAAGGTTTCATGAGAGTAGAAGCTGATTCACCTACTTATCTCCAGTTTCTATGCCTG  
 GCACAAAACAGGGCGAGGATCAGAGTGAGGCAATTGAGGTGCGTGCCTCCAACACAAAAG  
 CGCGGTAGTTAAAAACAAATAATTTTTAATGCAATATTTTACAAATCAAATTAATGCAA

139365 CAAAGCTGTTCCATCCCTCTGCCAGGTCCAACACTATCTGCATCTCCTCCAGTCATGCT  
 GGTGTCAGGGAACAGCACCAAAATTCACCCACTTGCTTAAAGTGGAAACTGGGTCTCT  
 GTCATTTCATCCCTTTCCCAAAGCCACATCTCAATGCAGCTCTGGTTATGAGCTCTTGAC  
 TGTCTCTTCTCCTTGAGCAGATCTTGCCAACAGAGTCTCTGGCTCCATTGCATCCCTGG  
 CCAATGCAGCCCACGGTCTTCAGAAATGGCGGCATTGGGTCTCCAGCACACAGAGGAGA  
 [C, A]  
 TCTATCACCTTGATCGCCATTGGGCTCTTCAATCCGGTCTGAGGGGTCTTTCTAAC  
 CTTACCTCCCTTGCTTTCTCTGGCTCTGCCCCTTGGCCAAGTGAGACCAGCAGTCCC  
 CTCTCAGACACATCTTCTGCTTTACATGTCTGTGCATTTGTTACAGTTGAGATGCACTG

ACTTCTGTGCGGTCAGTGCAAAAGTAATTGTGGTTTTTGCAATTAAGAGTAATTATACCT  
GCCTTTCAAATACTGCCCTTCCTTTAGGGCCTGGATTAAATGCTATTTCTCAAGAAAGTT

141321 ATTTCTGCAGCAGCCCCGCTGAGGTCAGTGTCTTCTCCAGCTGCCCTCCTTTAGTC  
GCAGTAGGGGCGGCCAAGACACAAGTAACACAATCAGATCATAATTTGCCACTTCTTAA  
TGGCTTTGTGGCTTCCTGTAAGCTAGGAGACAACGTATCAGACAACCCTTGGCATCAGGG  
AGGGGAGAGCCAGCCTCCTCCTGCAGGCCAGCGTGGGAAACCTGGCTTCTCACACCTT  
CACTCTGTCTATGCCACTGAGCCTCTGTCCCAGGGAATGCAGTGGTGTACACATACACACT  
[C, -]  
ACACACACACACACACACACACACTCAGATATACTCATTCTCACACATGCTCATATAC  
ACCCTCATATACTCACACACTCATATACTCAGATACACGATACCTCCACACTCATACAC  
TCATCTCTCACACACATACATACACACACACACACACCCACATATTCAGACATATAT  
ACACACACACTCTTACACTCACACATACATGCACACATACATATACTCATACAA  
TCATACTCTCACATACACTCACACATGCTCACACACTCATACACTGTCACATATACATTC

141736 ATACACTCACTCTCACACACATACATATACACACACACACCCACATACATATTCAGAC  
ATATATACACACACTCTTACACTCACACATACATGCACACATACATACATATACTC  
ATACAATCATACTCTCACATACACTCACACATGCTCACACACTCATACACTGTCACATAT  
ACATTACACTCATACACATACACACATACAGTCACTCGTACTCACACACTCATATTC  
TCACACACACTCTCACACTTACACACACACACTCACACTGACACACACACACTCACAC  
[A, -, T]  
CTGACCCCTAGACTGCTCCTCATTCTCAGGCCAGGCGTCTTCCCTGTGAAGCCTTCCCC  
AGCGTGTGGGCTTAGGACTTATCTCAATTTACACTGTCTTGCATCCATTTGTCTCTCT  
GTTGCCCTTGGCAGATTGTGAGCAGCCTGAGAGAGGCAGGGCCTTGGCCTGTTCACTTTG  
TACTCCTGTCTATGTGGCAAAGGCTCTATTTATTACTCAGAGGGAATTCAATAAATGTTGA  
CCGGATACATGGTAGATGGGTGGATGGATGAACCTTGAATGAATGAGTAACCCTGAGGAT

142173 TGTGAGCAGCCTGAGAGAGGCAGGGCCTTGGCCTGTTCACTTTGTACTCCTGTCTATGTGG  
CAAAGGGTCTATTTTATTACTCAGAGGGAATTCAATAAATGTTGACCGGATACATGGTAGA  
TGGGTGGATGGATGAACCTTGAATGAATGAGTAACCCTGAGGATTGGTAAATGTTCTTTT  
TTTTTTTTTTTGTAGACAGAGTCTCGCTCTTTCGCCAGGCCGACTGCAGTGGCGCTATC  
TCGGCTCACTGCAAGCTCCGCTCCTGGGTTACGCCATTCTCCTGCCTCAGCCTCCCGA  
[A, G]  
TAGCTGGGACTACAGGCGCCTGCCACCGCACCCGGCTAATTTTTTTGTATTTTTTAGTAGAG  
ACGGGGTTTACCGTGTAGCCAGAATGGTCTCGATCTCCTGACCCCATGATCTGCCCGC  
CTCGGCTCCCAAAGTGTCTGGGATTACAGGCTTACGCCACCGCACCTGGCCGGTAAGTGT  
TCTTGTCCCAAGGAATTCTTCTACCTCAACTCCACTCAAAATGAGAACCCTGGGGAAGAG  
AGAGATTGATGGATTGGCTCATCAGGACTCTGTCCCCACCCTGCCCCCTCCTTTCCCAT

142337 TGGTAAATGTTCTTTTTTTTTTTTTTTTGTAGACAGAGTCTCGCTCTTTCGCCAGGCCGGA  
CTGCAGTGGCGCTATCTCGGCTCACTGCAAGCTCCGCTCCTGGGTTACGCCATTCTCC  
TGCTCAGCCTCCCGAATAGCTGGGACTACAGGCGCCTGCCACCGCACCCGGCTAATTTT  
TTGTATTTTTTAGTAGAGACGGGGTTTACCGTGTAGCCAGAATGGTCTCGATCTCCTGA  
CCCCATGATCTGCCCGCTCGGCTCCCAAAGTGTGGGATTACAGGCTTGAGCCACCGC  
[G, T, A]  
CCTGGCCGGTAAGTGTCTTGTCCCAAGGAATTCTTCTACCTCAACTCCACTCAAAATGA  
GAACCCTGGGGAAGAGAGAGATTGATGGATTGGCTCATCAGGGACTCTGTCCCCACCCTG  
CCCCCTCCTTTCCCATATGGGGAGCAGGATGTGGTGAGAACTTGCTCAAGAAGTGGGTA  
AACACTTTGATGGCAGAGGCCATGTCCCGTTTCTTCCACTCACAACCAAGTGAGGGGCA  
CAAATTATTCCTTCCCCCTGCCCCACTGCAGGAAAATGTACAAATCTTAATCTCT

142788 GTGGTGAGAACTTGCTCAAGAAGTGGGTAAACACTTTGATGGCAGAGGCCATGTCCCGT  
TTCTTCCACTCACAACCAAGTGAGGGGCACAAATTATTCCTTCCCCCTGCCCCACTGCA  
GGAAAATGTACAAATCCTAATCTCTCCATAAGCACTGGAAGCTTGTGGCATAG  
GGATTAGAGTCTGGTCTCTACGATAAGCTAGCCACGATGTTGAGCCTTCAACCATCGAT  
AAAATCACTTGGAATCCAGTATCCCTGTTAGAGTTGGTTTCACTGCCCATGTTGCATGC  
[C, T]  
GCTTTGTGAGGGTCTCATTAAAGACTTTCTTCTCCACCTTAGACAGCACTGACCCTCT  
GTTTCAAGGCTCACACAGTCTGTGACCCAGGCCACCTGCAGCTGTGCTGCCACTCACCA  
AAGTCTGAGAGGAAGTGTCCCTTACCAGGACAGTACGACTGGCCCAACCCCACTGTGC  
TCTCCATGTGTGTGGGAGTGGCCTCCCCACCCCTGCCAGAGCAAGAACTGATTCTG  
GGTCAACCCACCCAGGACTAGAACCCAGAGCTAGTCTGCCTCACTCCTGAACAACCCAGC

146349 TGATTAATCGTTAGGAGTGAAGTGGAGGCTCCAGAGTCAACCCCTGCATCCTCCACATGT  
GCTACTTTGAGTCCACTTGAGTTGAATTGAATTCTGGGCCACAGAGTTGAGTGTTAATGG  
GCTGAAAGATAATTAAGGTGTTTTCTACATCTTGGAGTGAGAACAAGAGCACGCATGTGC  
CCTGGCACCAAAGGGACACAGAGCTTGGCATATTTCTAGGAATTCTCCAGGGTGTGGGG  
AGAGGGAGGACCAAGCTCCCAGGCCCTGCCCCCAAGGGCTATGAGTGCCAAGCCTGTGT  
[G, T]  
TGAGCACCTGGCCAGCTTTCTGTTTGAGAAGACATCATCTGGGGGGCCAGAGGGGACATC  
GGGGCATGTACAGAAGCAGTTGTCTGGCTCTCTTGCCCTCAGTGAGGACGTGGTCTTGA  
GATCTGTGTCTACCTTTCTCTCCCAATGCCCTTCTTTGGACAGTGTCTGTGATGGACT  
CAGGTGAGGTCAGATGGTTTTTTGAAAGCAGATGGCCCCACTTGCTGCCTGAGACCATTG  
TTTACTTCTCATATCATGGCTGGCAGCAGGGCCTGTGCTTGGCAGGACTCTTCCTCTAAA

147030 TTTCTTATTTAAACATCCTAGGTCTCGGTCTTTTCTTTTTAAATGTGTTGGGGGAGTAAA  
GTTCTCAAATGAAGATAACTTATGAGACTTATTACGCAGGCTGATCAAATGGCATGATAA  
ATCATATAAATGTTATAAAATGCTTTGATATGAATAGCAGAAATAGTGAATAAGGATGAAG  
CATCCAACCCTTCTCCAAGGTCACTGGAGTGAAAAATATCTTATTGGGCGCCCCAGATAT  
GTCCAGTCAGTCAGCAACAGAGCCTAGCTTGTAACCTCCGTAGAATTTCTTTGCTAATTC  
[G, T]  
GAGGGTTTTGTTTGTGTTGTTGTTGTTGTTGTTGTTAGGGAGTAAAAATCAAATTTGCATTCAT  
CCCAGGATGTTTCAAGGACAGATTTACAGCAACAAACATTGGTGAACATAAACTGGGAGA  
TTGCACTGTAGAGTTAGGATATGGAACAGAAAAATGTTTAAAGCTCCAGTAACTACCTA  
GAAATGTAATTAAGTCCCTTGCAAGAGGCCAAAATGCCAAAATGTGACAGTACCCTGT  
TCTTGAAGAACCCTTCTGGAGGTAATCAGTCTGTTATGACAGGGGAGGATGGATGGAGG

147884 CCAAACTTTATTTAACCTTCAATGTTGCTAAAACTACTTTATACATACAATTAATATC  
ATGGAATCCATGTTATAAGAAAAATTGTAGCACTGAAAGGGAAATTGTTCCCTTTATTTT  
CTCTTGCTTGGCGTAACCTGAAGGAAACAGATTTAACTGAAAGAGGATGAGAAGTTAGCC  
TCAGAGCATGCAAGAGTTGGAAGGCGTTTGAAGCCAGAGCTCAATTCAAGCCCTTGTTTAT  
CAAACGAGGAACTGAGACTCAGAGAAATTTGGTGTGTTGGCCCAAAGTCACACAGCCAGC  
[A, G]  
GTGTGACTAGCATTCAGGCCTGCCCTGACCCAGTGAATACTCCCTGTAGAAAGTTTCCAA  
AGAGACAATCAGATCCCCTAGGTAGCGTTGGGCCCCACTGGAAGTCGACTTTTTTTTCAG  
TTTCACTATAAAAACATGCCCTGTTACTTCTTAAACCGGAGATGAGGCTTGCAGCTATTAG  
GCTTCTCTAGGAATAGAGCCCTGGAGCTCATAGACAGAAAGAAAAGAAATGTGTGTTTCAT  
GCGAGAAGCAATGATAAGGTGAAACTAATGAGCTGGAAACTGCAAAAGACCAGGAGCAG

148673 CGCACAAAGCAAGAATGAAGTAACATAAGCAGAGATGTACTGAAAATGAAAGTACACTCC  
ACAGTGTGGGAGCGGGCCTGAGCATAGGGCCTGAAGGGCCCCGTACAGAATTTATGGGG  
GCTTAAATACCCCTCTAGAGGATTCCATTGGTTACTTGGTTTACACCCCTATTTAAATGAAG  
AGGATGAAGTAAAGTTACAAAGTCATTTACTCGGCGTACACCCCTATGGGGAGGATATTTT  
CTTTCTGAGCTGAAGTGTGAATCAGCCTCATGTGTTTCTGCCTCCAGATCCTATTTTCC  
[T, C]  
ACCTCAAAGGAGGACCCTGTGTCCATGACAGGGGAGGGGGAGAGTGTGGCATGATTCTT  
TGCCTAGGGAAAGGGGAGGGTGGTGAGACACACAGCTCACTAGTCCAGTGTGGATAAGCC  
AGAGTTCATCAAAAGATAACCCAAAACCTCAGCGCCACAGCATTTCACTTCCCAAAGCCTGA  
GTTGACGCTTATGGTCTCCTGTTCTCCCATGAGAGAGGTAGCCTTGGCCCCACAGCCTC  
TTTCTCTCCTGTGTGACCCCATGCTCAGACTACAACTGCTGGAGGACAAGGACTGT

149048 GGAGGGTGGTGAGACACACAGCTCACTAGTCCAGTGTGGATAAGCCAGAGTTCATCAAAG  
ATAACCCAAAACCTCAGCGCCACAGCATTTCACTTCCCAAAGCCTGAGTTGACGCTTATGG  
TCTCCTGTTCTCCCATGAGAGAGGTAGCCTTGGCCCCACAGCCTCTTCTCTCCTGTG  
TGACCCCATGCTCAGACTACAACTGCTGGAGGACAAGGACTGTCTGTTTGGTTTTGC  
TTTGTGTGTAATTTCTCCACAGTCTCCTCTGCAGATGTTTGATAATATCTGCTAATTGAAT  
[A, T]  
TTTAATTTACTCAACTCTAAGGTAGATTTTTGAGAGCAAAACAATTTTAAAAAACATT  
ATTTTATATTGACACTTGAAGTTCTAAATAAGTGGGTTTTTTTTTAACTGGAATTAATAA  
AATCTAATCCTCGTCATATTTAATTGCTCTAAATACTGAGTGACTCTTGGTATGCTATTA  
ATTCACATGACAGCTCTTCATGGGTGGTGGCTGATGGGGGCTTCCCTCTCCACTGCTT  
GGAGGAAGGGCTGCCCTGCACGGACCCAGGGTGGTGGAAAGGAAAGCACTCTCGGGGA

151229 CATCAGTGCAAATGACACAGGCAGCTGAGAAGCGTTTGATTGGCCCCGCTGCCTTGGCTG  
GCTAACATGAACTGACAATTCTAAGAGGCTCCTCTTCACAGCTCACTCGCATCCCTTCA  
GGGCTTCACAGCATTTCAAAGGAAAGGCATTGGATAAAGGAGAAAGCAGCAGAAGTGGAA

AGGACACAGATTTCAAACATTCTGTTTCACATTGGCTACAGAGTTTGTGTTGTGCGGGGA  
 AAGGGGTGAGTCTATGCATACCAGGTACCACCCACCTGTGTGCTCCAGAAGGCCCCGTGAT  
 [A, G]  
 TCCTGCCCCAGTTGCTGAAATCTATAAAATGTCAGGCCAGGTAGCAGCAGGGTGAAAGGCT  
 GGAAGCAGCCAGCAAAGGAAAGGTTAACGTGCGCATGCTGTTTGAGTTCCATGGCATGT  
 GGCATCTTGCACAACCAGGCCATTTTGAACCGAGTTAAATTTCCCTGCAGCCACAGGG  
 AGGGAATAGATAAATCATGAATGAATTGAAATTATATTTCTTCTCTTAGCTTTCTTTT  
 TTCTTCTTCTTTTTTTTTTTTCTTCTCTATCTCCCCACTCCAGGAAAAATGTTACAGAAA  
 151848 CACCCAGTGCATTTAGCTCCATCCTTGCTGAGGGTCAGAGGAATGGAATCTCACCAGTCA  
 TATTTTCATGAGGTCTTTTCAGCAAGTTCTGTACTGTGTAGAGATCTGAAGGGCAAAAATT  
 CAAAAAGTCAGCAGGGCACAAATGGACCAGAGGTAGGAAGCAGACAGGTTTCTGGGGCA  
 TCCTCTGGGTGCAGCCAGGCTGTGTGTGCTCCCAGCTCTTCTCAACTCAGAACCATTTCAT  
 GTCACAGATAGTTGGGGGCTCGTTCTATGCTGGGGCAAAACCATAGTGAAGAAAATTGC  
 [A, T]  
 TGCTTATGTGGTGTGTTACTTGTGCTTCAGGGTTTTTTGTTTTGTTTTGTTTTGTTTTGT  
 TTTGTTTTTTAAGTACAACCTTGTATGATGTGCCTTGACCATTGACAAGTCTTCAGAAA  
 AAAAGGAAAGAAAGAAAGCTTCATACTATTGGGTCTTAACCCAAAGTGCCAGTGACCACC  
 AAGGGCTGTTGGCCTCAGCAGGGAAAGCCTGTGTCTGGGTCTTGAAGGCAGTGTAGGCAG  
 CAGGCAGAGAATCAGCTGGTTTTCCCCCTCCCTAAGCTGGACTAATGCGTAAGCTACACT  
 152415 CCTCCCTAAGCTGGACTAATGCGTAAGCTACACTGAAGAAAGGGGAGGGTGACCATCCCC  
 CAAAAGCAGGGCTCACTAGCCAAGTGTGTAACCCAGAGCACATCAAAGCTAAAGCAAAAA  
 GTAGAAGCCAAAGCTATCACAAGGCCTAAGTTGGCGTCCAGTCCGAGCATGGCCCCACTTG  
 TTGTCTCAGGACGGCCAGCTTCACAGCCAGTGGGCTTCATCTCCACCCACCAGGAGGTTT  
 GGGCTAGGGTGTGTATGTGCATGTGTGAGTCAGTGAATGATGTGCTGCAGAAATCAGA  
 [A, G]  
 ATACAGAAGGACCCTGAGGAGCTCCTCCAAGAGTCCCTGGGGTCTAATATAACCAGGAC  
 ATTATGCCCCAAAGACTGATCCACATGGCTGAGGCTCTTTACAGGAAATACCTGCATTGC  
 TAAGTTACTATCCCCAGAACGCCCTCCCCCTGCCTTACACGTAGCAAGTAGAACTTGCTGA  
 TGACAAGACACTACGAGAGCTGGGAACCTAGAAGTATTCGGCGACTGTCAGACCTCCAGG  
 AGCCTCCCTGTGGGTTTCAGAGGGAGCATGCACATGAACCTCTGGGTGCTAGCCCAGGCTG  
 152539 AAGCCAAAGCTATCACAAGGCCTAAGTTGGCGTCCAGTCCGAGCATGGCCCCACTTGTTGT  
 CTCAGGACGGCCAGCTTCACAGCCAGTGGGCTTCATCTCCACCCACCAGGAGGTTTGGGC  
 TAGGGTGTGTGTATGTGCATGTGTGAGTCAGTGAATGATGTGCTGCAGAAATCAGAAATA  
 CAGAAGGACCCTGAGGAGCTCCTCCAAGAGTCCCTGGGGTCTAATATAACCAGGACATT  
 ATGCCCAAAGACTGATCCACATGGCTGAGGCTCTTTACAGGAAATACCTGCATTGCTAA  
 [C, G]  
 TTACTATCCCCAGAACGCCCTCCCCCTGCCTTACACGTAGCAAGTAGAACTTGCTGATGAC  
 AAGACACTACGAGAGCTGGGAACCTAGAAGTATTCGGCGACTGTCAGACCTCCAGGAGCC  
 TCCCTGTGGGTTTCAGAGGGAGCATGCACATGAACCTCTGGGTGCTAGCCCAGGCTGGAGG  
 CATTCCCTTCTTGCAAGGGAGCAGGAGGCCAGCACAGGTTTGCAGAAGTCCATGTCTC  
 AGGCTGTGGTGGAGTGTGGGCACCAGGCCAGGAGTCTGTTTCATAATTCCATGTACACAA  
 153191 TGCTCTTGAAGCCTCCTTGAATATGGTCTTGAGCTGACATAAACTTCCCTTGGGATTTT  
 CCTTCTTTTCTCTCATCTAGACATTTCTCTTTTGCAGGCCTCTTCAAAGACCCTCTCT  
 TGTGAGCTTCAGTGGCTAAGTCTGCATGCCTGGGCCTTTCTAGCAGGTATTTGAAAACG  
 CAATCAATGTATGTTAAGAAATGTAATCAATGAGGTACACATATATATATATATGCTTAA  
 AAAACAAATTTATTTTATCTTTTGTGTGTTATCGGTAGCAGTTGCAATGTTTTACCTTC  
 [A, G]  
 CCCAGAAGTTACTATGCCAGAAATGCTCTCATTCTTTTGGGTTTCAGGTTTCTCTTG  
 CCTATTATTTTCTTGGGAAATAAAAAATACCTCTCAAGATAATTGCCAGCATTTTCATAG  
 GATGAGTTTGTCTTTTCTAAAGCAGGAAGGCTAGGAAGTACCAAGAAGAGGAGCCTGG  
 GTAGATGAAGGAATAAAGAGGAGGAAATCTAAACATGGGGAGATTACTGAATGTGCCATG  
 TGCACCTCTCCCTCTCCACTCTTCTCAACTCAACCACAAACCTCCCAAGGCAGGGGCCA  
 153232 AAACCTTCCCTTGGGATTTTCTTCTTTTCTCTCCATCTAGACATTTCTCTTTTGCAGGCC  
 TCTTTCAAAGACCCTCTCTTGTGAGCTTCAGCTGGCTAAGTCTGCATGCCTGGGCCTTTC  
 TAGCAGGTATTTGAAAACGCAATCAATGTATGTTAAGAAATGTAATCAATGAGGTACACA  
 TATATATATATATGCTTAAAAACAAATTTATTTTATCTTTTGTGTGTTATCGGTAGCA  
 GTTGAATGTTTTACCTTCACCCAGAAGTTACTATGCCAGAAATGCTCTCATTCTATTCTT  
 [A, T]



GGAAGTGTGTGATGGACCTTGAAACACGGGAGGGACGCAGACCTCACCCCTCACCTCGG  
 ACCCCGCTGGGGTGGTTGCTTGAGGAAGGCTCTCCCTGTAATCCGCCCTTTCAGTCACT

160186 TGAAGCCGCACTGTCTGACCTTGGGAGCTGTCAGCGACCTCTCAACCTCAGTCTTCTGTCT  
 TCGAGAGTGGGGACGTTAGTGTGTTCCTAATGGTGTGATGGTGAGGACAGTGACAGTGAG  
 CTGAGCTCTGACAGAGGCAAGTGGCCACTGCTGCCGTTCACTTTGTGTTACCGCCCTTT  
 AACTTCTGTGTGCCCTCTACTGTGAGCCCCGGGAGCAGGGAACACCTGACATCATGTGCT  
 CTGAGGGAACGCATTGAAAAGCCAAGGGTGGCACCTGGAAGGGATGGGTTACAAAGAGCC  
 [A, G]  
 TCCACACACCTGCACTCTGGGCTGTGCCACTGGCAGCATACGGGGGCCCCCTGTTTCTC  
 TCCTTCAGACGGTGTGGGTGCTGGGCCTGGTGATCTCCTGAGCCACTGAGGACGGTCCCT  
 GGGCCTGTGGAAAATAGAGGTGCAGGGAGAAGTCTAGAAGCCATGACTGTGACTACAGAG  
 TGAACAGAAACCATTCGGCAGGGCAGCCCTGGGGAGGGAAGCAGCATATGGTTTCAGCAG  
 GGGCAAATTAACGAATGTTATCTTCTCTACTTTATGATCACTGTTTACTGATAGTGC

161108 GGCCAAGGCAGACAGATCACTTGAGGTGAGGAGTTCAAGACCAGCCTGGCCAACATGGCG  
 AAACCTGTCTCTACTAAAAATACAAAAATTAGTTGAATGTGGTGGCGGGCACCTGTAGT  
 CCCAGTCACTTGGGAGGCTGAGGCAGGAGAATCACTTGAACCCAGGAGACGGAGGTTGCA  
 GTGAGCTGAGATTGCGCCACTGCATTCCAGCCTGGGTGACAGAGTGAGACTCAGTCTCAA  
 AAAAAAGAGAAGAAAAAGAAATTATAATCCACATACATGGTTGCTTATCATGTGTTTC  
 [G, T]  
 GTGAACCTTTATGGAATTCGAGCTGCAGGAACCAGACCTACCATCTTATGAAGCGGGTCAT  
 TCTTTCTGATCTGCCAGCCAGGTGCTTCTCAAAGCACAGGATTGGAAATTTCTGGGAG  
 ATGCATCAGGTACTATTCTGATTCATCAGATAAAAGTTTGGCCTTAAGAAAAGATAGAAT  
 AGTAGAGTGGTTTAAAGGGTGGACTTGGGCATCAGGTGACCTGGGCTGGACACTTGGCCA  
 TATAGAGGCTTGGACAGGTGGTGGCCACACTCTGTGCCTTGACTTCCCCGGCTGTACAC

162060 GGATGAGTGGAGCCACAGAGCTGGGGAGGACCGGGAGAGGCCTGGAACCTGGATCCACC  
 ATCAGAAGAGGGAGCAGCGGTGTGCAGACATGTCTCTTAGGGGCTGTGCTGAAACAGG  
 AACCTTTGCTGTAGACTTTGGGAGGGGGCTGGGCTGTGGGAATACGGCTGCCTGAAAGAG  
 GACCGGCTCCTGATTCCCACCTGCGGAGGGCCCCGGGAGGGAGGAGCCCCAGTGTGTTCC  
 AGGCAGGCTCTCCTGATAGTTGGTTAGGAACCACTCGAAAGAGAACACTTGGAGGAGTGG  
 [C, G]  
 GGGAGTGCCAGTGTGAGCAAGTTGGGAGCAGAAGAGAGCCCCACAGTGTGGAACAGGTAG  
 CCAGCAGAACCCACTAGTGGACGAGAGCGTGAGGGGTTGTGTTGTTAAGACAGAGTCTC  
 GCTCTGTTGACGACAGTGGCATGGTTCGATCTCGGCTCACTGCAGCCTCCACCTCCTGG  
 ATTCAGGCGATTCTCCTGCCTCAGCCTCCCAAGTAGCTGGGATTACAGGTGCCTGCCAGC  
 ACGCCCCGCTAATTTTTGTGTTTTTAGTAGAGACAGGGTTTCGCCATGTTGGCCAGGCTG

165993 TTGCTTTGAAGAAGGTATGGTGTGTGACTTGGATACGATGAAAATGAAACAGATAGATC  
 AGGTATAAAGTCTAGAGATGCTAATGGTGTGGGTGAGTTGTATAATGCAGGCTTTGCCA  
 CTGAGTGGTTTTTTGTTTTGCTGACTCCAAAAGCCTGATTGAGCCTCTATGACTCAGGAGA  
 AGGGAGGACATGAAATTTAGGGGTTCTGTGACCCAGGGGGTCATACCACAGATGCCTCCA  
 TATTTTTAATTCTCACTTCTACCAGGGCTCAAGATTATGTACCACTGCGTGAGCATTTTT  
 [A, T]  
 AAAAATAAATAAAGAATGACACCATGCTATATTATATTGGTTTTGCTGAACATGCTTT  
 TATTGACTCTGGTCAAAAACGGATGAGGATTTTTTTTTTTCCTTAACCTTGATGAATAGT  
 AGATAAAAAGCATCAACATCACATCTCAAGAAAAGCTGCAGAAGAGAAGGCTCAATAAAA  
 ATGGATCTGACTCCATGCAAGCATAGCTCTATTTAGCATCTTTCATTCTAATGACTTAAT  
 GGCCAGATACCACAATAACAATTAGCAACAAAGAGAAGTTATTGGGAGCTGAAAGGGA

166679 GGCACGGACATGTAGGATTTAACCCTGAGTAGTTTATCCTTAGCCAATTAGCCATTGGA  
 AGGTGATTGCCACCTCAGATAATCAGTTGAGACCTTTGCATGGAGACTCATCCTCACTCC  
 TCCTGGAGGATGCTGTGTGGCCCTGCCTTGACCTGCATGCTGAGAATTTATTGACAGC  
 TCAAATCCACAGAATGGGATTTGCCATGTGACAGGGGCTGTCCCTACCAGCCCAGCTTC  
 TCACCATTTGGGGTACAATGCCAGCAACTCACTGGTTGATTGGCAGCATGGCCACCCATA  
 [C, T]  
 CCATTGAGAGGCATGAAAAGAGCTCCACCACTGAACATCCACTTGTCCCAGGCCCTGCCA  
 GCCTGGACTAAAATCCATGCAAGAGAGAAGCTGGGCTTGCCAGGTAGCCAGTCACTTACT  
 GTGTGAAGCTACCATGTGCGGAGCAGTGTGAGCCGACCTGCTGCATGGAGCATGCCTG  
 TGGGAGGGAGTGGGCTCTGGTGGCAACATTGCTGGAGTGGGGAATCTGAGTTCTCTAGT  
 CCTGACCTTGCCACCAGCCATCTCTAGGGCTCATGGAAGTGACTCAATTTCCCTGGACT



167136 CCCTGCTGCACTGGAGCATGCCTGTGGGAGGGAGTGGGCTCTGGTGGCAACATTGCTGGA  
GTGGGGAAATCTGAGTTCTCTAGTCCTGACCTTGCCACCAGCCATCTCTAGGGCCTCATG  
GAAGTGACTCAATTTCCCTGGACTTTTCCGGGGTTCAGTAGCCCTGTCTATCACTTGCTT  
GCCTCAGGCCCTCAAGCAGGTGGCCCTCCCTTGTCTGTGCTCCGTGCTGGTGGATTTTC  
CACTTGCATCCCTCTGTCACTGTGATGGGTGAGGGCTGGAGGCACAGTTTGCCTATCTGC  
[T, A]  
CTAAACGTTTCTCGGCCACTGTAGCAGATACTGGCAGTGCTCTCATTGTTTCTACACAC  
TGAAGGCATCTTTTGCAACTCTCTGTCTCCCTCGGGGTGCTACCAGGATGCAGGGGCAT  
GTCTGGTCAGTGACAGGGCAAGCCAGGAGTGCTGGGAGTTCATGTGTCCAGGAGTAGCC  
TTCAACCAACAATGAGCAAGAGTTGCTGGATAAGTACCAGCTCTGCACCCCTCAGGTGCA  
GGAAGGCATCTGCCCCATCTCCCAGGTGCCCTTCTGGCAGGCTTAATCCCAGCTGCCCCA

173782 TACAATTAGAGACATGGTTGATATATTTGATGACATAAAATCTTTAAGCTTCTGTATATC  
ATAAGGCAAATGAAAACTGGGAAAAATAGTTGGAGTTATGAATGACTTTACTATAGAA  
AGAGCTCTTAGTAATCAATAAAAAAGATGACCATCCACATAGAAAAGTTTGTGAAGAACA  
TGAACAGAGGGCACACACACACAGACATTACATCCATCCACCAAATACACATCATT  
TTAAATATTAGATTCTGAACCTTCCCTAATAATCAAATAAGGCAAATTAACACAGTTAAC  
[T, -, A]  
ATATATTTTGGCCATGAAATCAGCAATTTTAAATGATAAAATTCAGTTTGTAGCAAGGAT  
AGAGTGAAAGGGGACTCTCAAATGTAGCCAATGAAATATAAAATGGCACCAACTCTGTG  
GCCAGTAATTTGGCAGTACTTATTTATTAAGTCTCTTTTTAAACATGCTTTTGATTGAGT  
AATTCCACTTCAGGCAATTTATCACAAGGAAAAAATCAGAGATTGCCTAAAGATTTATG  
TTCAGGGATGTTTACTGTAGCTTTGTTTGTCAAAGCAGAAGTTTGGAAAGCAGCCCAAT

176290 GCCCAATAAATAATTGTTGAATAAGTTAAAGGAGAAGTAATATTTTCCCCATTTACTGAG  
CACTCACTGTGTGCCTCACCTGGCTCAAGTCTCATAGCAGCTCGAACTCTAATTCTCAC  
ACCACCCCAACAAGGTAGGTTTGGCAGAAGGGAGCCTGAGAAATTAGGTACTACAAATCT  
CTCGTGACGTGCATGTCTATTTGAAAGTTTATTTCCCTTTGCAGGTTATTGTCTGATGTT  
ATGGCATTGGGTAGATATTGTGGGAGAGGCAGAAATGTCATTATGAAGAGAATTTCTCTC  
[T, C]  
ATTAGCTAATGTTTAGAGAGGCATTGTGACATACAAAAAGACCATTGGTCTGGAATTGT  
CACATCTGGATTCCAAATTTACCTCCTTCACTAACCTGTGTGAACCTCAACAAATCACAA  
CCTCTCTGAGCCTCTGTTTCTAATCTATTTTTTTTAAAGATAATGAAACCACTCTGGCC  
CTGCTTGAATGGAGGTATAGTGAAGTGAATGACAGAACAGATGTGATTGACAACTTATA  
CTTACACCTCTGTCTTACTGAATTGTTATTTAACTCTCAACTGAGGTAGGTCCATCAGT

181889 TGAGGAATGTTGGGGTATTTCAAGGTTTGATAAACCAAAATTCCTCTGGGCCGTTGGGCA  
TTTGAGAGACGGAACACTGAGAACATAAGACATGCTGAGATTTAGGTTGTTTGAACCT  
GAAATCTCAGCTTACTCCTCCCAGAACTTGTGCTGACTTTCGGAAAAAGGAAACATTTTA  
GCCTGGTTTGGGTTCTGGATTGCAGTAGCAGTGGTGTGCTAAACTAAAGAAGGGAAC  
GGAGCTTCTATCAGTGCATTATTAAGCAGAACTGGCTGACTGTCTCCCTGGGAAATAAC  
[A, G]  
GGACTGAGGCTTGTGCCTCCAGCCAGAGATTGCTCCTCCATAGCCCCCATTTGCCACCGCT  
TCTACTACTTTTGCCTCCACTCCCCAGCCACCCAGTGATCCACCCTGCCAGAATGCACAA  
TGCCGGCATTGATCATTTCCCAACCCACGGTACAGTTCAAGTTTCCCTCTGCTGTAATTGG  
CCATGAGAGCTCCGTTATGAGGGATCAGAATTGTTAGTCTCTTCCCTAATGATCTCTGTCT  
GGAGACCAACTTCATGACATTCTCCAATTAGGGAGTGCGGAGGGGGCAGGGCAGCGCTAT

182606 ACCTCCCCAGACTCCCGGCTATCCTTTGCTCCCTGTGTCTCCTCCCTTCATGGCAAAGACTT  
TCCTTTGGTCAGGCTTGAAGGACAACACTCTGTCTTCTGCTAGCACACTCTGTGCTTTAA  
AAATTCCTAAGTGGGAAAGATGACTTCTTTTGAGATCAAAGGCACACTCTCAGGGATGTT  
GGGGCAATGAGGAAGGTGAAAGCTACAGAGGAAGTCAAGACTGGTCCACTTCAGCTCCC  
CATATGTGGAAGAAGAGAAGACCAAGGCCAAGAGAGAAGGGTCTTGCTCAGGGGGGTGCC  
[C, T]  
CAGCACTTAGACAGGAAGACTAGAGCCCCCACGTCATTCTGCTTCCCTTCTCCTCACC  
CTAACTTCAAATGCAGGCTCTTTATCCTATGTCCCTGTTCTCCCTTTGGACCCAGCCAGC  
TTCTGGATTCTTCCGCCACTTGGCTTATCGTGCAGTGACAAACCACAGGCTACACTT  
GACAGCCAGAACTGGATCATAAGCTTTGAGGGCAGGATCCATATCTCCCTTATTCTCTG  
CTGTGTCCCAGGACCTAGCATCTCACCACAGTAGGAACACAGAATTATTCAATGAGTGA

184663 AGAATCACTCAGCAAACGCTTGGATGTGCACTGACTTTGAACGGCTAGAAAGTTTCAGGGG  
CACCACCTGCCTCGGAGCTGCTGCATGACTCGGGTCTGAGGTGTCCCTGAAATCTTGGG  
GACAGGCACTTCTTCTGCTGGCGTCAGACAGAATGTGGTCTCCCCACAGGGAGCCAGTC

CGATTCTGCAGAGCCCGGCTCGGCCCTGCTGGTCTGCGGGTGCCCTTTGCCCTCGTGAC  
ACAGCGACACCTGGTGGTAAGCTGGTGAACCGCCGGGACCCAGCGCTGTTCCCTCAGCTC  
[C, T]  
ATGCTGGGCTCCAGCTCACGTGCGCTGTGTGCACCGAGGGACTTGTCTGGCAGTGAC  
ACCCAGTCTTGTGCACCACCGAGTACTCCGTTGTGACAAAGTTATACTCAGTTATGTATG  
TCTTCTTCTGCTCTGTGCAGAGCAGTCCCGTGGCCTCAGTCATGAGTCATTTGTCTG  
TACTCATTCTCAGAGGGGAAGAAAATGAGCTGTTTCTAACTACGTCTATCGTCACCACCC  
CGATCGCCATCCTTACTGCCATCAACCACCACCATCCCTGCCGTCACCCTACCATTGCC

185392 CTCTTCACATAGCAGCAGAATTGGGCAGCCCTGCCGCTGAGGTTCCAGGAGGGAGGCTG  
AGGGCCTCTTCCACAGAGAGTGCTGTGAAAGGCTCTTGAAGGAGGGCAGGAAGGCCA  
AGAGCAAGGCAGAGGGAGGATGGGCCCTTCCAGCTCCTAGCTGGCAGACAGGACAGC  
ACGAGGTACCGCTGGATGCATTTAGGACTGAAGTTTCTGCTGATGTCAACGAATGCTGG  
AAATGTCCCAAGACCCAGTTCAGGACTGCGCCTCATCCAGGTGAGCAGTGCAGAGCAGT  
[C, T]  
AAAAGGGGCCAGGAAACAAGCCGCCATTTCATTCGTGCAGTCCAAGAACAAGCCAGCGG  
GCCAGTCCAACCTGTTGTGACAGAAATACCAGGGGATCTTTCTTTTCTTTCCATTTC  
CCCCAGGCAGCAACTGTACAAATGAAACTTCAAACTAGAGCTCGGCCGTTCAGAGCCTG  
CACAGCACTGACCTGTTTCTGTTTCAATTTAGCCTCATTCTCTCAGAAGACAGAAAGCCTC  
ATTTCATCAGAACAATCACTTCAGCCCAGAGGGGCTTGGGTGTTGTTTCTAAGACATTACA

186612 AAAGAACATAGATCATATCGTACCCTCTCCTGCTTAAAATCCACCAGTGGCTTGTACT  
ACACTTAGGACACAGCCAGAGCTCCCCACCCAGCCCTGCTGCTCTGTCCCCAACTCGCCT  
CTAACCCCATCTTTGCCCACGTCTTCTTCTCTCCTTCATCCCAATCATCCTTCTTGCTC  
TTCCTTGAAAACATCAAATTCACCTCCACCCGAGGGACTTGGCACTCGGTCTGGACTCTG  
ATCCTCTTCAGCTTGTTCCTCACTCCATGCTGAAAGGCTGCCTCCTCCAAGAAGCCCTC  
[T, C]  
CTGACCACCTTATCTAAATATCCCTTGTCCCTTCACTCCTCATCTCCTTTTTTAGTTTTT  
TTTTTCTTCATGGTACTTATCACTTCCCGCTGTCTCCTCCACTCAAATATAAGCTCCAT  
AAAGGCAGGGATTTTTGTATGTTTTGTTCACTGCTATATCTCTAGCACTTAGAATATGGC  
CTGGCACACACTCAATAGGTATCTGAATGAATGAATGAATGAGTGAGCATGATGCC  
CACCCAAAGCAGCTTGTGCCAATCTTTGTCTATGGGCTGTCATTCAAGGTGGCGGG

187014 ACTCAAATATAAGCTCCATAAAGGCAGGGATTTTTGTATGTTTTGTTCACTGCTATATCT  
CTAGCACTTAGAATATGGCTGGCACACACTCAATAGGTATCTGAATGAATGAATGAATG  
AATGAGTGAGCATGATGCCCACCCAAAGCAGCTTGCTGCCAATCTTTGTGTCCTATGGGC  
TGTCAATCAAGGTGGCGGGATGGGCTCACTTGTTATCCTCCTGAGAGCAGCACTTAGAGA  
TCATTTCTGAAGACAGCACATAAGGCGTTGGAATGGCTCCCCCTCCTGGACCAGCTTGC  
[C, T]  
AGTGTACCCACCGTTAGGGCAATGGCCACCCCGTGGAATGCACACCACAAGGGCAAGCG  
AAGAGCTCAGCGAATGGGGGAACTCTTATCCCATATGCTCAGCTGTGGGCTGGGATC  
ATGCAAGGGAAAGTATACAGACAGCAGGAGGGGAGTCCCCGACAGTGCGCTGTAGCCAG  
AACTGGCCACATAATTTGTAGGACCCACTGCAGAAGGCAAATGTAGAGCCTCAGCTAGGG  
GTTTCCTTTGGGCCCACTGCCCCAACCTCTACAGACAGACAACATCCAACAGCTTGCAAC

187090 GGCCTGGCACACACTCAATAGGTATCTGAATGAATGAATGAATGAGTGAGCATGAT  
GCCCCACCAAAGCAGCTTGCTGCCAATCTTTGTGTCCTATGGGCTGTCATTCAAGGTGGC  
GGGATGGGCTCACTTGTTATCCTCCTGAGAGCAGCACTTAGAGATCATTCTGAAGACAG  
CACATAAGGCGTTGGAAATGGCTCCCCCTCCTGGACCAGCTTGCCAGTGTTACCCACCGT  
TAGGGCAATGGCCACCCCGTGGAATGCACACCACAAGGGCAAGCGAAGAGCTCAGCGAAT  
[G, -]  
GGGGAACTCTTATCCCATATGCTCAGCTGTGGGCTGGGATCATGCAAGGGAAAGTAT  
ACAGACAGCAGGCAGGGGAGTCCCCGACAGTGGCTGTAGCCAGAAGTGGCCACATAATT  
TGTTAGGACCCACTGCAGAAGGCAAATGTAGAGCCTCAGCTAGGGGTTTCCTTTGGGCCCA  
CTGCCCAACCCTCTACAGACAGACAACATCCAACAGCTTGCAACCCCTGTACCAGGATGT  
GTTCAAAACCTGACTTGAAGGTGAGCAAGAGGCCCACTGTATGCACCATGGTGCTATCAG

187290 GCTCCCCCTCCTGGACCAGCTTGCCAGTGTTACCCACCGTTAGGGCAATGGCCACCCCGT  
GGAATGCACACCACAAGGGCAAGCGAAGAGCTCAGCGAATGGGGGAACTCTTATCCCAT  
ATGCTCAGCTGTGGGCTGGGATCATGCAAGGGAAAGTATACAGACAGCAGGCAGGGGA  
GTCCCCGACAGTGGCTGTAGCCAGAACTGGCCACATAATTTGTAGGACCCACTGCAGAA  
GGCAAATGTAGAGCCTCAGCTAGGGGTTTCCTTTGGGCCCACTGCCCCAACCTCTACAGA  
[C, G]

AGACAACATCCAACAGCTTGCAACCCCTGTACCAGGATGTGTTCAAAACCTGACTTGAAG  
GTGAGCAAGAGGCCCCACTGTATGCACCATGGTGCTATCAGCCTGGGCAGTGACAGCCATA  
CCCTTGCCCCGCCCTGAGATGCCTGGTGGTGTGGGCCCAACCATTGCCTCACCCATACCC  
ACACCCAGGCCCCCTGCCAGGGGTGGAGGGCAATGGCAGAATGCTCCCTCCCTCAATGTGA  
CCAGGTCACCTGTTCAAGGTTGAAGGCAGCAGCAGGGGTGAGTGGGGGAGACCACCCAGGG

187862 CAGGGGTGAGTGGGGGAGACCACCCAGGGGATAGGGGTGAGAAGCAGGCAGCAGAGAGCC  
ATCCTGGGATGCTGAGGAGGAGGTGAGAGTCAGGGCCACACATGAGCCGAGGCTGCAAGC  
CCTGGCACATTCTCCACTGTCCCGTCACCCCTTCTCGTATAGAACACAAATTCAAAGAGGA  
TCAGCAAGCATTTCAGACAAGAACCCAGCAGTAAGCCCCAAGCTCAAGGCCCTTCTGA  
GTGTGGGACCCCTGTATTACTCTACAGCCATGCACCCGTGGGCCAGCCCTGGCTGCAGCCA  
[T, C]  
GAACAGAGGGCCCCACCAGCATGGGTGTGTGACCCTCTCCTGTGTTAGAAGCATCTCTGCA  
GTTTGAGCAGCTCCAGACCACACCAGGTCCCTGTTGTCTCTTGCTCCTGCTGCTATGGT  
GGCACCATCATTTGAGGTGAGGGAATTTGCACAGTAGTCCCTGCCTGAGAGCCCCCTTCA  
TCTTCAGAGCCTAGAGTGGGTGAGAGCCCCCTGCCAGCCAGCCTGCACAGGTGTGAAGCCC  
TGGATTGCTTGTTAAGATTGGGAGGAATAAAAGATTCTTAAATTTCCACTTGAGATTA

187937 GGAGGAGGTGAGAGTCAGGGCCACACATGAGCCGAGGCTGCAAGCCCTGGCACATTCTCC  
ACTGTCCCGTCACCCCTTCTCGTATAGAACACAAATTCAAAGAGGATCAGCAAGCATTTC  
AGACAAGAACCCAGCAGTAAGCCCCAAGCTCAAGGCCCTTCTGAGTGTGGGACCCCTGTA  
TTACTCTACAGCCATGCACCCGTGGGCCAGCCCTGGCTGCAGCCATGAACAGAGGGCCCCA  
CCAGCATGGGTGTGTGACCCTCTCCTGTGTTAGAAGCATCTCTGCAGTTTGAGCAGCTCC  
[G, A]  
GACCACACCAGGTCCCTGTTGTCTCTTGCTCCTGCTGCTATGGTGGCACCATCATTGTA  
GGTCAGGGAATTTGCACAGTAGTCCCTGCCTGAGAGCCCCCTTCATCTTCAGAGCCTAGA  
GTGGGTGAGAGCCCCCTGCCAGCCAGCCTGCACAGGTGTGAAGCCCTGGATTGCTTGTTAA  
GATTTGGGAGGAATAAAAGATTCTTAAATTTCCACTTGAGATTATTTAATCACAAAGTGT  
GGTTTGAACAAAAAGTAAACCTGAATATGAATTATTTTAAATTTGAGGTATAATTTACA

188286 ACCATCATTGTAGGTGAGGGAATTTGCACAGTAGTCCCTGCCTGAGAGCCCCCTTCATCT  
TCAGAGCCTAGAGTGGGTGAGAGCCCCCTGCCAGCCAGCCTGCACAGGTGTGAAGCCCTGG  
ATTGCTTGTTAAGATTGGGAGGAATAAAAGATTCTTAAATTTCCACTTGAGATTATTT  
AATCACAAAGTGTGGTTTGAACAAAAAGTAAACCTGAATATGAATTATTTTAAATTTGAG  
GTATAATTTACATACAATTAATGCATAGATTTTGTCAATGATATTCAGCACATGTATA  
[C, T]  
ACCATCACTCAATCAAGATATAAAACATTGCTATCAACCTAGAAAATGATCTTTCTAGTC  
AACCTCCCATTCACAGAGGCAAGCACTGTTCTGATTTCTAGCATCGTAGATTAGTTTTTA  
GCTATTTTTGAATTTTATGTAAGTGAACCATACAGTAAGGAACTTTGTGGCTTCTTTG  
ACTCAAACCTCAGTATAACACTGAGTTTTATCCATGTAGCTGGGAAAATCCATTGCTCGTT  
CCTGTTATTGCTAAGTAGTATTTTATTGTATGACTATATCACAGTTGTTTTGTGATTCC

188478 GGTTTGAACAAAAAGTAAACCTGAATATGAATTATTTTAAATTTGAGGTATAATTTACA  
TACAATTAATGCATAGATTTTGTCAATGATATTCAGCACATGTATACACCATCACTCA  
ATCAAGATATAAAACATTGCTATCAACCTAGAAAATGATCTTTCTAGTCAACCCCTCCCAT  
TCACAGAGGCAAGCACTGTTCTGATTTCTAGCATCGTAGATTAGTTTTAGCTATTTTTGA  
ATTTTATGTAAGTGAACCATACAGTAAGGAACTTTGTGGCTTCTTTGACTCAAACCTCA  
[G, A]  
TATAACACTGAGTTTTATCCATGTAGCTGGGAAAATCCATTGCTCGTTCCTGTTATTGCT  
AAGTAGTATTTTATTGTATGACTATATCACAGTTTGTGTTTGTGATTCTGTTAATGTACA  
TTAGGTTGTTTCCATTTGGGAACCTACTATGAATAAACTTCCATAAATATTTTGTATG  
TGTCCTTTTGTGAGCATAGTCTTTTCTTTCTTGGATATATACCTATGAGTGGCAAATA  
AGCACATAAAAAGATGTTCAAGATCATCAGTCATTAGGAAATACAGATTGAAATCACAGT

189156 TTGGCAAGGATCTGGGAGAACCAGAACATTCATAATCTGCTGACGGGAATGTAAATGGT  
ACAACCACTTTGGAAGATGGTTTGACAGTTTCTTTAAAGTAAACCTTTTACTTTTACC  
TTATGATCCAGCCATTCTACTCTTACCTACTTACCCAAAAGAAATTAAAGCATATATCCA  
TAAAATATCTGTACATAGATGTTTATAGCAGCCTTATTCGAAATTTGTAATATTAGAA  
TCAACCCAAATGTCCATTACAGTTGAATGAATAGACAACTGTGGTATATCCATATAGT  
[A, G]  
GAATGCTACTCAGCAATAAAAAGGAATGAACTGGCTGGGTGTGGTGGCTCACGCCTGTAG  
TCCCAGCATTTTGGGAGGCCAAGGCAGGCAGATCATGAGGTCAAGATATTGAGACCATCC  
TGGCCAATGTGGTGAAACCTGTCTCTACTAAAAATACAAAAATTAGCTGGGCATGGTGG



194884 CACCAAAAGGAGAATGCCATGTAAGAACCAACAAAATCTGTGAATAACAAAATGATACCG  
AATATAAAATATGTATATTTAATATTTTTTAAAAATTAAAAATATGATTGAAAATCAAGA  
GATTATACAAATGGCCAATCATCTTTATGAATGGCTAAAAAGAACTTCTGAAAATTCAA  
ATTCAAACTCAGTGAAGAGTGTAAAGATAGAAATCCTCACTTTCAGGAAACCTGATGAA  
GAGCTGGAAGACGGATTTGAAAAATTATACAGAATGCAACATAGAAAAACCAAGATGGG  
[A, G]  
AATGCGAAAGAGATAAGAGATACTTAAATAGAATGAAAATTTGTAGCATATTTCTAATTA  
GAATACCTGGAAAAGAGGGAGAAAAATAATGGAATAGAGATACCATTTAATGGAAGATAG  
GTAAGGATGTTCAAGAACTGATGAAAGATAGAAATCCTCACTTTCAGGAAACCTGATGAA  
TTATAAGCAGAATAAATGCAAAGAAATATGTGTGTTTGCATCACAGAGAAATTGCAGAAA  
ACCAGAGAAGATGTTAAATTTATCCAGACATCAAAAATGGATTACCTATAAGGGAATGAA

195290 TTTAATGGAAGATAGGTAAGGATGTTCAAGAACTGATGAAAGATAGAAATCCTCACTTTC  
AGGAAACCTGATGAATTATAAGCAGAATAAATGCAAAGAAATATGTGTGTTTGCATCACA  
GAGAAATTGCAGAAAACAGAGAAGATGTTAAATTTATCCAGACATCAAAAATGGATTAC  
CTATAAGGGAATGAAAAGGCTATCAGGTAACATCTCAACAAAGCCAGAGGGCAGGGGAAC  
AAAAGGTTTATCAAGTTGAAAGAAAAAAATACACGAACATAAGAGTAATTACACAGCAT  
[A, -]  
AAAAACTCTTTAAAAATTAGGATAAAATAGACATTTTAGACAAACATAAAGAGAATTTGAG  
GTATAAGAAGGAATTATGAGGAATAAAGACAGACTCACAATATACAGTATTGTCATATAG  
TTACGTCAGGAAAGGTTCTAAGGTGTTCTAAGGTTCTTCATGGGGAGGGTTAAAGTGTG  
ATTATAGACTTTGGCTTAATTATACATTTTAAAAATTTGAGATAAACAGTAGAAGATAAA  
AGAGATATTTAATTTTTATATGAGCAGAAGAAGAAAATCAGGGTGAAGTATTTGATTCAA

195939 ACAATCTAATATAAACTAAATAAATAACATGTTTATGTGGGGGTACTATAAGGACAATGA  
ATGAATCACCACTATATGCAGACATGGGTGTAACATAATATCGTGGGAGAGCAAAAAGAG  
AAAGTCTCTGATGAGTACATAGAGTGTGATTCAATTTATATAAAGTTCAAAAACATGGAAA  
ACAACATACTGCATAGAAATACAAAGGTGAGATAAACCAAAAGAAATGATAAACACAAAAT  
TCAGGCTAATGACGGTCTCTGTGTGGCAATGAGGGAATAGAACTGGAGAGGGACACATGG  
[C, G]  
AAAATTCAAAATGAAAGACACCGTTCTTTTTCTTTAAATGAATGGATTCATCCGTTTGT  
GTACGATAATGCTTAAGCCATCCATAGAGTGGATAAGTGTCTTTTTCTGTCTACTCATT  
TTAATAGAAATAATTTAAACATTTATAGTTATTCAAATTTGATTTTTTGTGTGGTGTGA  
AATAGGTTTCCAATGTTGTTTCATTCTAGGTGGATAGCAGGTTGCCCCAGCATCATCTAT  
CAGAGAGCTATCATTTTCCCATTTGGAGTGGTAACCTCTTATTATACATCTAATTTTCATAT

196291 CCGTTTGTGTACGATAATGCTTAAGCCATCCATAGAGTGGATAAGTGTCTTTTTCTGTC  
TACTCATTATTTAATAGAAATAATTTAAACATTTATAGTTATTCAAATTTGATTTTTTGT  
GTGGTGTGAAATAGGTTTCCAATGTTGTTTCATTCTAGGTGGATAGCAGGTTGCCCCAGC  
ATCATCTATCAGAGAGCTATCATTTTCCCATTTGGAGTGGTAACCTCTTATTATACATCTAA  
TTTTCATATACATTGGCATTATTTCTGGATCCTGTTTTCTATTTTATTGCCAAATCTGC  
[A, C]  
GTCACGTGATTTGCCTTTTCTAGGTTGATCTCATATTGATTTTATCACAGCAGCTTTCTG  
GGTTGAATGTTCTAGTATCTGGGAAGGCACATCCCCCTACAGTATTCTTTCTCTTATTTT  
CCTTGGTTATCTGGGGGCATTATTACTTCAAATGAACTTTTTAAGATCATTTCATCTAA  
GTCTAAATGATTGCATTAAATTTGTGTATTTATGAGAATGTCTTCTACCCACGAATAA  
GAAATGTTCCAATCTTATTTTATGACCTTCAATAGGGTTTTACAGCCATTTTTTATATAG

196533 TTCATATACATTGGCATTATTTTCTGGATCCTGTTTTCTATTTTATTGCCAAATCTGCAG  
TCACTGATTTGCCTTTTCTAGGTTGATCTCATATTGATTTTATCACAGCAGCTTTCTGG  
GTTGAATGTTCTAGTATCTGGGAAGGCACATCCCCCTACAGTATTCTTTCTCTTATTTT  
CTTGGTTATCTGGGGGCATTATTACTTCAAATGAACTTTTTAAGATCATTTCATCTAA  
TCTAAAATGATTGCATTAAATTTGTGTATTTATGAGAATGTCTTCTACCCACGAATAAG  
[A, C]  
AATGTTCCAATCTTATTTTATGACCTTCAATAGGGTTTTACAGCCATTTTTTATATAGGT  
CCTATGGCTTTCTTGTCAAATTTGTTTACTAATATTTTATGGTTTTTACCATGATTATGA  
GTAGGTGGTTTTTCCGTTTTTCACCTCTAATATTTATGCTACTGTTGAGAGGAATGAT  
TAATTTTGGCATATTTTATCATCTGTGTCCTCAACTAGTTTCATAATTCTCTTATAATTTAATA  
TTTTTCTACTGGAGTCTCTTGGATTTCTAAGTATACAGATACATAATCATCAAAAAGAGA

197176 TCATTGTCTGTCTTATTATACTTCCTTTATGAATAAGAATGATGATAACAAATATCCCT  
GTCTGGCTCCTGATTTTAAATGGAAACAGTTAGTGATTGGCTATTTAAGGAGTTTTCTTC  
TATTTCTTGTCTTAGAGTTTTAAATGGAATTATTACTGTATTTAAGACTTTCTTTAT

TTCTATTTTCACTCTAGGTTTTGAGATATGTCTTCTTGTGACCTTGAAGACTGGAGTC  
 TTAATAGTGACCATTGTCTCCTTAAATTGCCCTGATATTCTTAACCTTGAAGACTTGAC  
 [A, G]  
 TCTCAATAGTGACCATTATCTCCTTAAATTCTTCTGAAATCTCCTGATTTTCTTGT  
 GGCTCAAAAATCATAGTTCCCCAAAAGCCTTCTTGTGCTGTGCTTGATTCTCGTGGCA  
 TTTTGGTATTTTGTGTCACTATTTAAGGTGTCACTCCTCCTCTGCAGTAGCTGTAATTC  
 TAGTCATTTTTTTCAGAGGCTGGAGCTCCAGTGTATATGGTTCTTTCCATAGCCTGTTT  
 GAAGGCAACACTGAAGTACCTTAAGGCAGTGGTGGTCTCACAGAGAGTACCTGATAGGGC  
 199693 CAGTTTGTGCTGTGAGTTAGTTCCAGTCACTTTGCCCTAAGAATGTATAATTTCACTC  
 CCTACCTTGAAGCCAGGCGGAGTTTATAAGGGTCCAGTGAAGCCCTGGCGCAAGGGAA  
 ATTGCAAGGGAAGCATTTCCTTTGGGTATTTGAAGCATGCTATTTGCATCTGCCTTTT  
 TAAAAACCATTCAATACTTTTCACTATAAATATGTTACCTTTCCATTAAGGCTGGCCTCC  
 CGAAGACAGCAACTACCCACATGTTTCATGCACTTGAATCAGTAAAACCAATGGCTACT  
 [A, T]  
 CTTTTCCAGTCCATTTTATTCAACCTTTTACCAATTCAGTGTCCGAATTGAGCACTTACT  
 AAGTGCCTAGCTCTCTACATGAATTATCTCATGTAATCCTCAAAGCAATCCTGTAAGGGG  
 CAATCCCGTAAGGACCATTGTTATCGTCACTTTTAAATAGGGAAAAGAAGGTGGAACCTT  
 GCCTGGGCTCACACAACCTATCAGCTGTGAAGGAGCACAGGACTGGGTGGAGGCCAAGGTT  
 TTACTGTGTTACTGTGTTACTTGAGACCCAGCGGGATCAACACAAGTACCGTAGGAAGTT  
 199734 AATGTATAATTTCACTCCCTACCTTGAAGCCAGGCGGAGTTTATAAGGGTCCAGTG  
 AAGCCCTGGCGCAAGGGAATTGCAAGGGAAGCATTTCCTTTGGGTATTTGAAGCATGC  
 TATTTTGCATCTGCCTTTTTAAAAACCATTCAATACTTTTCACTATAAATATGTTACCTT  
 TCCATTAAAGGCTGGCCTCCCGAAGACAGCAACTACCCACATGTTTCATGCACTTGAATCA  
 GTAAAACCAATGGCTACTACTTTTCCAGTCCATTTTATTCAACCTTTTACCAATTCAGT  
 [G, A]  
 TCCGAATTGAGCACTTACTAAGTGCCTAGCTCTCTACATGAATTATCTCATGTAATCCTC  
 AAAGCAATCCTGTAAGGGGCAATCCCGTAAGGACCATTGTTATCGTCACTTTTAAATAGG  
 GAAAAGAAGGTGGAACCTTGCTGGGCTCACACAACCTATCAGCTGTGAAGGAGCACAGGA  
 CTGGGTGGAGGCCAAGGTTTACTGTGTTACTGTGTTACTTGAGACCCAGCGGGATCAAC  
 ACAAGTACCGTAGGAAGTTCTGTTGCAGCACTCCCCCTACCCACCCCGCCCCGCTCCA  
 201371 ATTACCTTCCAGCAATGGATAACCATGTGTTTCTGTTGAGCTTTGGGATTGGAGAATGTG  
 GTCAAGTCTTTTCAAGTGGTCAAACTGCTTTCATCAAGTGCACAAGCACCTCAGCATAC  
 AGGCTGTGCTCACCGGTTGAGTTTGAATCACCTGTGGTCACTGAGAATACATCACATCT  
 GCCCAGCAGTCACCTGTCCAGTTTTCAGGCAAAATAGCAGGAGAGGAGACAGGGAGGTGAT  
 GAAGATGGAAACATCATAGTGGGAGGTAAGGGGCTTAATGGCCAGGTGTCCATGCATGAC  
 [T, A]  
 AGGAGTGGGTTTGGGCCGTGATGTTTACAGATCCAAGCAGGGCTTCTTCTGCAGCCCT  
 GTAAACCTCCAGCCTTTAGAGAAGTTGCTACTTAGGCCTCTAAGCTATGTGTCCTGAGG  
 TGGGTGAGGAGCAGCCATCCTGCAGGCCAGGGTTGCTGATGTGTGGATGTATCCTGATGT  
 TGGAGAAGCTCACACTATGGACATCTAGATCCTCCAGGCATGAGTTCCTTGAACCTGAAG  
 CAGAGACCATATCACCAGCTGAGCAGATTATCCCAAGTTCAAGGGATTGAGTGAGACT  
 201433 CAAGTCTTTCAAGTGGTCAAACTGCTTTCATCAAGTGCACAAGCACCTCAGCATACAG  
 GCTGTGCTCACCGGTTGAGTTTGAATCACCTGTGGTCACTGAGAATACATCACATCTGC  
 CCAGCAGTCACCTGTCCAGTTTTCAGGCAAAATAGCAGGAGAGGAGACAGGGAGGTGATGA  
 AGATGGAAACATCATAGTGGGAGGTAAGGGGCTTAATGGCCAGGTGTCCATGCATGACTA  
 GGAGTGGGTTTGGGCCGTGATGTTTACAGATCCAAGCAGGGCTTCTTCTGCAGCCCTG  
 [T, C]  
 AAACCTCCAGCCTTTAGAGAAGTTGCTACTTAGGCCTCTAAGCTATGTGTCCTGAGGTG  
 GGTGAGGAGCAGCCATCCTGCAGGCCAGGGTTGCTGATGTGTGGATGTATCCTGATGTTG  
 GAGAAGCTCACACTATGGACATCTAGATCCTCCAGGCATGAGTTCCTTGAACCTGAAGCA  
 GAGACCATATCACCAGCTGAGCAGATTATCCCAAGTTCAAGGGATTGAGTGAGACTGA  
 TTCAAAGCTAGGCTCTACCACCTACTTGCTGTCTAACCATAGGCAAGTCACTTGACTCAT  
 201848 ATGTTGGAGAAGCTCACACTATGGACATCTAGATCCTCCAGGCATGAGTTCCTTGAACCT  
 GAAGCAGAGACCATATCACCAGCTGAGCAGATTATCCCAAGTTCAAGGGATTGAGTGGA  
 GACTGATTCAAAGCTAGGCTCTACCACCTACTTGCTGTCTAACCATAGGCAAGTCACTTG  
 ACTCATGTTTCTTAATCTGTAAAATGGGCATATATTATGCCACAAATATGTGCTGAGTA  
 GGGCCTCTGTGTCTACTTAATAGAGCTTTAAGGAGGATTAAATGAGCATCAGATGAGCTC  
 [A, G]

TAGATTCTAAGAGTTTAGCATGGTGCCTGGTGGGCCTGCCTCAGTAAATAATAGTCACTT  
TACACATGGCCTTCTCTGGCTGGGTGTTAACACACACATGTCTTGGGAGGAATTACAGA  
TTCTCATCCCAACCCCTTGAATATAAATGAGGCGTTACAGGGTGGAGGTGGACCTGACGCA  
GCCCCGGCATCCAGGGCATCTAGGAGTGTGGAGGCCCTCACCAAGGTAGCCTGTAGTCAG  
AGCTCAGAGAGGGCTGCTCTCTTCCCACCAGCAGCCCTGAGGGGTGCCGAGAGTTTCTG

202730 AGGTCTCAGGTCTAATCTCACCTCCTCAAAGAGGCTTCCCTGACCAGAGTAAAGTGTGCC  
CGCTGCAGCACCCTGGTTATTTCTTCTCGCATTTAACACCATCTACACTTGTCTTGTT  
TTTTTGTGGCCAGTTCACCCCTTGTGTGTCTTCTACACTGTCATGTTAGTGCCCTGA  
GGATAGGAGCCTATTCTGTCTGAATCCTCAGCACCTGGAATCGGGACTGGCACATAGCAG  
GTGCTCAGTAAATATTTGTTGGGTGGATAGATAGGGGAGGAGCTGGCAGGCAGGAAGTGC  
[G, A]  
GAAGTGCCCCGTTGTTACCACCCACCCCATCTTAGGGTAGACATGGCACGGGACTGGAGC  
GTCGGGCCCTCTGCCTGGTTCTCACACAAACCTGAATTCTGCAGCTGCATACCAGGCACCT  
GGGTGGTTTTCTGCAATGAGAGAGTCGACACTGACAGGCACCTCTGTCCCTGGACCACCT  
TGCCACGTGTGAGGGTATAAGTTATCTTAAAGCGGGGAAGAATACTGGGACCGTTATGTC  
CAATCCCTGGATGCGCACCCACATATCTGCACATGGCTACATGTACATGGCTCTTCCGC

204904 TTAACACTGACCCCTCAGAGTGCAGCCTGCAGGGAAGGCCATGGGAGCCTCCCCAGCAAG  
TTAAGCAAACGTAGGTGCCCTGCTGCCCTGTGTGACGCTGGGCCTCAGAGGTGCTCACTAC  
CATCTGGACACACAGCTTCAAAGGAGGGGGTCAGGGAAAGTAGCTTCTCCCCCAGCCC  
CCCATGAACTGCTTTGGTTTGCCCTGCCCTGGGATGGAGTAGGTGGTCTCTGAAGCCCCTT  
CCAACCTGCTTCTCCAGGATTCTAGTTCTCTTACTCCAGAAGACCCACCTCCACGGAC  
[G, A]  
TCCATCTTCCCTCATACCTCCATCCTTCCACTTCCCTTCTGCCCACTTTGGAGAAGGCA  
AGGGAAATGTACCCCTACCGGGTCAACACATGTGAGGCTTACCACCCTCCCCATCCGA  
GCCCCTAGCCTGGCTTCTTAACTGCACTGAATTAGCCTTCAGGAGATCAGTTCTGAAAT  
TTCTGCATTCTTAAACCTGAGTATACTGGGGCCACACGAGGAGCAAGGCCTAGCACCT  
GTGGGACCTCTGAGGCCAGAGCAGGGCAGGCACCTTTGGGGTAGGAGGATTCAGAGAGGG

205171 TCTCTTTACTCCAGAAGACCCACCTCCACGGACGTCCATCTTCCCCTCATACCTCCATCC  
TTCCACTTCTTCTGCCCCTTTGGAGAAGGCAAGGGAAATGTACCCCTACCGGGTCA  
ACACATGTGAGGCTTACCACCCTCCCCATCCGAGCCCCCTAGCCTGGCTTCTTAACTGCA  
CTGAATTAGCCTTCAGGAGATCAGTTCTGAAAATTTCTGCATTTCTTAAACCTGAGTAT  
ACTGGGGCCACACGAGGAGCAAGGCCTAGCACCTGTGGGACCTCCTGAGGCCAGAGCAGG  
[G, A]  
CAGGCACCTTTGGGGTAGGAGGATTTCAGAGAGGGACACTTGGACTTGGGCTGGTAGCAAGC  
ACTTCATAGAGAAAATGCCTACAACAGTGAAGTGGAGCTGGTTAGCCAGAGGGAGAAAG  
CAATGGGGGCCAGGGCACAGCTCTGAAGCAGGCTCGGAGAGGCCAGGGCACAGAGACTT  
TGCCTCTGTTTCTTCAAATGGGCAATTAGTGGGTGTCATCCTATCTGCATGGGAAGGT  
TATTAACACAGTGATCCCATGGCAATGCTCTGCGTCTGCCCCTGTCTTGGGAGAGAAAC

205991 ACAGGAAGGCGTGCAGAGGGGCGCTGAATGCCACTGGGCCTTCATGGTGACATGCCGAAC  
AATTAGCAAAGTGGATAAAAGAGATTCCCGCCTCCTTAGGATCTGCACTTTTATACTGCT  
CAGAGATATTTGACCTTCTAGTTTATTATGATTCAAGAAAAAGTCAATACTTCTTAGTTT  
GCCAAGGCTGGAGGAATTTAAATGAATTATTGAATCAAGCAGTTAATCTGCCGATAACTG  
ATTTTTTTCTCTTCAAATCTGTAATGATGAAAAGCAGACTTAACCAAAAAACAAGAAAAA  
[T, G]  
ATATTTTTTTCTTTTTTTTTTCTTCTTTTTTGCTTAGACATTTTAAATCCCATGGGTAGGA  
GCCGGGGCTAAAAGTTTGGTCATGATTACTAGGGCCATTCTGTCTTGCTGAGTATTTTGA  
TGGAGATTTAATTAACACTTAAAGCAAAGTCTTCTGAGGCTGTAAAAATCTGTATTACCA  
TTTCAGTTGTCTTTTGGTGTCCCTGTGTAATTCTCAACTTTCCATCTGTACCTTTAGTGA  
CATGTGCTGATTATCTCATTTCAGACTCCCAGAATGCAGTGTGATGTTGGTGATGGACG

206052 ATTAGCAAAGTGGATAAAAGAGATTCCCGCCTCCTTAGGATCTGCACTTTTATACTGCTC  
AGAGATATTTGACCTTCTAGTTTATTATGATTCAAGAAAAAGTCAATACTTCTTAGTTT  
CCAAGGCTGGAGGAATTTAAATGAATTATTGAATCAAGCAGTTAATCTGCCGATAACTGA  
TTTTTTTCTCTTCAAATCTGTAATGATGAAAAGCAGACTTAACCAAAAAACAAGAAAAA  
ATATTTTTTTCTTTTTTTTTTCTTCTTTTTTGCTTAGACATTTTAAATCCCATGGGTAGGA  
[C, G]  
CCGGGGCTAAAAGTTTGGTCATGATTACTAGGGCCATTCTGTCTTGCTGAGTATTTTGA  
GGAGATTTAATTAACACTTAAAGCAAAGTCTTCTGAGGCTGTAAAAATCTGTATTACAT  
TTCAGTTGTCTTTTGGTGTCCCTGTGTAATTCTCAACTTTCCATCTGTACCTTTAGTGAC

ATGTGCTGATTATCTCATTTCCAGACTCCCAGAATGCAGTGTGATGTTGGTGATGGACGC  
CTGTTTCGCCTTTCACTTAAACGTGCCCTTTCCAGCTGCCCTGACCTCTTTGGTGTGTGA

207237 GCTCCCTGGCTCCCATGCTCTTTGCCTGATCTGCATACATGTCACCACCTTACAGAATGA  
CAAAGTCAGAAAGAGGGAAAGGTATGACTTGTTTCATCTTTGAGACCCCTAAGGTGCCTAA  
GACACAGCCTGGTCCAAAGTCATGACATAGTAAAGGAAAAGAAGGAAGGAAGGAAAACGT  
ATTGCAGGCAGGGGTGGAGGGGACCACTTTTTTAAAAAGTCATTGATTTTAAATAGGCCT  
CTAGTCCAGGAGGCTGACTGTGAGCCTGGGAGCAGTAGTGGCAGGCTTTGTCCTTCTGTG  
[C, T]  
AAGGTGCTTCTTTGTGAGCACGGAATAGCTGGGTGTTTTTCATTTTTCAACTGGAAGCAGG  
AAAAGTAAGCCTAAGAAAGAACCAAGAGTTGATCAAAAGCCCCAGCTGGGTCTAGGTT  
GGAAAGGTGTTGTGTTTCAGATGTTTCAGAGTGAGTCAGCCATGAAACCTGAGCTCTGCAA  
GGCAGGACACCCCTTCTTGGCACCAATGACCACCTCATGGAGGGACAGGGACTCCCTAGGA  
GACCCCAAGCCCCAGGCCCCACCTTGAGTAGCTTGGCTGCACAGGCAAATGGAGTCTGT

208791 CACTAGACGGTAAGAACCATTAGGGCAGCGCTATGGCTGTCTTATGCGCTTATGTATTA  
GCACCTAGCAGTGTGCCCTGCACCAAGAAAATGCTCAATGGCTCCCAGATGCTTGAAGAT  
ACAAGGGTCAGAAATGCACATCCTGGGTTGATTGATGTGGCCCTGGTAAATAGTACATGCC  
ATGGCCTGTGGAAGTATTTATGTATACAAATATTTGTGTACAAAATGGGTATACATGAA  
TTAGGAAGTGTGTAGAAGACAGAAGCAGCTTGCAGGCAGATGGGAACAGGCCCCACATAGC  
[C, G]  
TGAGCTACGAGAGCCCACTTGAGATTATGTGAGGTGAGGAATGTGCTTTAGGTTGCACAG  
GGAGGAGAGGAGGAGGCTTGGACTAGACACCTGCCAAGTGCTTGAACACTAGAAGACAA  
AGGCGTGAGAGCAGTCCAGGCTGTAAAGGCTGGGCACCAAGTGGGAAGGGGCAGAGCTC  
CTGCCCTACCCCTACAGAACCCCACTGAGGATGGTATGATGCTGACACACCTGAGCGGAG  
GCGGATTTCATGGCTGAGGTGGTGGAGCAAAGGTGTGTTGGCCTCCGTTACATCTATCTGT

208799 GGTAAGAACCATTAGGGCAGCGCTATGGCTGTCTTATGCGCTTATGTATTAGCACCTAG  
CACTGTGCCCTGCACCAAGAAAATGCTCAATGGCTCCCAGATGCTTGAAGATACAAGGGT  
CAGAATGCACATCCTGGGTTGATTGATGTGGCCCTGGTAAATAGTACATGCCATGGCCTG  
TGGAAGTATTTATTGTATACAAATATTTGTGTACAAAATGGGTATACATGAATTAGGAAG  
TGTGTAGAAGACAGAAGCAGCTTGCAGGCAGATGGGAACAGGCCCCACATAGCCTGAGCTA  
[C, G]  
GAGAGCCCACTTGAGATTATGTGAGGTGAGGAATGTGCTTTAGGTTGCACAGGGAGGAGA  
GGAGGAGGCTTGGACTAGACACCTGCCAAGTGCTTGAACACTAGAAGACAAAGGCGTGA  
GAGCAGTCCAGGCTGTAAAGGCTGGGCACCAAGTGGGAAGGGGCAGAGCTCCTGCCTCA  
CCCTACAGAACCCCACTGAGGATGGTATGATGCTGACACACCTGAGCGGAGGCGGATTG  
ATGGCTGAGGTGGTGGAGCAAAGGTGTGTTGGCCTCCGTTACATCTATCTGTGTACCTG

209076 ACAGGCCCCACATAGCCTGAGCTACGAGAGCCCACTTGAGATTATGTGAGGTGAGGAATGT  
GCTTTAGGTTGCACAGGGAGGAGAGGAGGAGGCTTGGACTAGACACCTGCCAAGTGCTG  
CAACACTAGAAGACAAAGGCGTGAGAGCAGTCCAGGCTGTAAAGGCTGGGCACCAAGTG  
GGAAGGGGCAGAGCTCCTGCCTCACCCCTACAGAACCCCACTGAGGATGGTATGATGCTG  
ACACACCTGAGCGGAGGCGGATTTCATGGCTGAGGTGGTGGAGCAAAGGTGTGTTGGCCTC  
[C, T]  
GTTACATCTATCTGTGTACCTGCACCCACCTAATGGGCCACTCCACTCAGCAGTCGTGG  
CAGCATGGAGTGCTAGGCAGGGCAGGGCTTGGGAAATGTGCCTTTACCCGGTGATGACAA  
TAGTCTTGGACACTTTCACAGCTGTGCTTATGATGCTAATGCCAAGGTGCTTCAGAGATC  
ATGAGACACATTATGGAATGAGGCCAAAATGAGCCTAGGAAAAACGTCCCCATTCTGGA  
AGCACTGCCAGCCACGTGCCGCCAGTTCCCTCTGCAACCGTGACACTAAAACACTTGAC

209143 GTTGACAGGGAGGAGAGGAGGAGGCTTGGACTAGACACCTGCCAAGTGCTTGAACACT  
AGAAGACAAAGGCGTGAGAGCAGTCCAGGCTGTAAAGGCTGGGCACCAAGTGGGAAGGG  
GCAGAGCTCCTGCCTCACCCCTACAGAACCCCACTGAGGATGGTATGATGCTGACACACC  
TGAGCGGAGGCGGATTTCATGGCTGAGGTGGTGGAGCAAAGGTGTGTTGGCCTCCGTTACA  
TCTATCTGTGTACCTGCACCCACCTAATGGGCCACTCCACTCAGCAGTCGTGGCAGCAT  
[A, G]  
GAGTGTCTAGGCAGGGCAGGGCTTGGGAAATGTGCCTTTACCCGGTGATGACAATAGTCTT  
GGACACTTTCACAGCTGTGCTTATGATGCTAATGCCAAGGTGCTTCAGAGATCATGAGAC  
ACATTATGGAATGAGGCCAAAATGAGCCTAGGAAAAACGTCCCCATTCTGGAAGCACTG  
CCCAGCCACGTGCCGCCAGTTCCCTCTGCAACCGTGACACTAAAACACTTGACCAGTTGC  
TCCAGCTTTATTGGCCGTGTTGAATTTATAGACTGATGTTCCATTCTCGTTTCCAAT



209185 CCAAGTGCCTGCAACACTAGAAAGACAAAGGCGTGAGAGCAGTCCAGGCTGTAAAGGCCTG  
GGCACC AAGTGGGAAGGGGAGAGCTCCTGCCTCACCCCTCACAGAACCCCACTGAGGATG  
GTATGATGCTGACACACCTGAGCGGAGGCGGATTATGGCTGAGGTGGTGGAGCAAAGGT  
GTGTTGGCCTCCGTTACATCTATCTGTGTACCTGCACCCACCTAATGGGCCACTCCACT  
CAGCAGTCGTGGCAGCATGGAGTGCTAGGCAGGGCAGGGCTTGGGAAATGTGCCTTTACC  
[C, G]  
GGTGATGACAATAGTCTTGGACACTTTCACAGCTGTGCTTATGATGCTAATGCCAAGGTG  
CTTCAGAGATCATGAGACACATTATGGAAATGAGGCCAAAATGAGCCTAGGAAAAACGTC  
CCCATTCTGGAAGCACTGCCCAGCCACGTGCCGCCAGTTCCTCTGCAACCGTGCACACTA  
AAACACTTGACCAGTTGCTCCAGCTTTATTGGCCGTGTTGAATTTTATAGACTGATGTTT  
CATCTCTGGTTTCCAATATCCTTCAAATGCATCTTCCTAAAGGTTTCTATTTCTGCAT

209499 GTCTTGACACTTTCACAGCTGTGCTTATGATGCTAATGCCAAGGTGCTTCAGAGATCAT  
GAGACACATTATGGAAATGAGGCCAAAATGAGCCTAGGAAAAACGTCCTTCTGGAAG  
CACTGCCAGCCAGTCGCGCCAGTTCCTCTGCAACCGTGCACACTAAAACACTTGACCA  
GTTGCTCCAGCTTTATTGGCCGTGTTGAATTTTATAGACTGATGTTCCATTCTCTGGTTT  
CCAATATCCTTCAAATTCATCTTCCTAAAGGTTTCTATTTCTGCATCAGAGTGTGCACA  
[C, G]  
CCTCCCTCACCATTGGTTATTCAAACAACATTTCTCATTTAATGGGAGGGAAAAACCAGC  
CACCACAAAACCCACCGAGGTGAGGAGTGATGGGGACAAGCTGGCGTGGAGCGGGGGGCA  
GGCAGCCTTGAGCAGATCAGGGCTCAGTTCTGCTTCATGCTGATTGAATTTATCCACCGA  
ATCCTTCTGACTCATTGAGGTTTTCACACATTGTGAGTTGCCGCCCACTTGGTATAGCAG  
TGCTCCTCTCTTAAGGACCCCTTTTGGTGGAGAGTGGTGCTGTGAGCTCCCAGAAAGA

209614 GGAAGCACTGCCAGCCACGTGCCGCCAGTTCCTCTGCAACCGTGCACACTAAAACACTT  
GACCAGTTGCTCCAGCTTTATTGGCCGTGTTGAATTTTATAGACTGATGTTCCATTCTCT  
GGTTTCCAATATCCTTCAAATTCATCTTCCTAAAGGTTTCTATTTCTGCATCAGAGTGT  
GCACAGCCTCCCTCACCATTGGTTATTCAAACAACATTTCTCATTTAATGGGAGGGAAAA  
ACCAGCCACCACAAAACCCACCGAGGTGAGGAGTGATGGGGACAAGCTGGCGTGGAGCGG  
[G, T]  
GGGCAGGCAGCCTTGAGCAGATCAGGGCTCAGTTCTGCTTCATGCTGATTGAATTTATCC  
ACCGAATCCTTCTGACTCATGAGGTTTTTCACACATTGTGAGTTGCCGCCCACTTGGTAT  
AGCAGTGCTCCTCTCTTAAGGACCCCTTTTGGTGGAGAGTGGTGCTGTGAGCTCCAG  
AAAGACCAAGGGTGGCATCTCAGTTCTGGTACTTCCCAGCTGTGTGGTGTGGTTGCATC  
ACTCTGCTTCTCTGGGCCTTTTCCTCGACTGTAAATGGGACTAATGGCAGTACCCACCT

209708 TTTTATAGACTGATGTTCCATTCTCTGGTTTCCAATATCCTTCAAATTCATCTTCCTAA  
AGGTTTCTATTTCTGCATCAGAGTGTGCACAGCCTCCCTCACCATTGGTTATTCAAACAA  
CATTTCTCATTTAATGGGAGGGAAAAACCAGCCACCACAAAACCCACCGAGGTGAGGAGT  
GATGGGGACAAGCTGGCGTGGAGCGGGGGGCAGGCAGCCTTGAGCAGATCAGGGCTCAGT  
TCTGCTTCATGCTGATTGAATTTATCCACCGAATCCTTCTGACTCATTGAGGTTTTTACA  
[C, G]  
ATTGTGAGTTGCCGCCCACTTGGTATAGCAGTGCTCCTCTCTTAAGGACCCCTTTTGGT  
GGAGAGTGGTGCTGTGAGCTCCCAGAAAGCAAGGGTGGCATCTCAGTTCTGGTACTT  
CCCAGCTGTGTGGTGTGGTGCATCACTCTGCTTCTCTGGGCCTTTTCTCGACTGTAA  
AATGGGACTAATGGCAGTACCCACCTGCTGCAGCCATGGAGAGAAGTGAAGGAGGGGCTG  
CACAAGCACCACCTTAGCACGCTGCCTGGTGCATGGCATGGATTGGTGTTCATGAGACCT

210292 TGGTGTTCATGAGACCTGCCATCATTATTTATTCTAATCCAGCGTGGCCACAGGCCGAGA  
GTAGAGAGATGCACAACTGTGAAGAACGAGAGGCAGGAGCAAGGGTTCTGTCTGGGAG  
GTTTGGGGAGAGATTTCTGGGCCCAGATTATTTAATGGTAGCTGGAGAGTGGGTAAGGAA  
GACATGAGTGTTCAGGCAGACACTCATTGCTGGGGCCTTCCCAGCAATGTCCACCTAGAG  
CCAGGGCTTCTCTTTCTGCAGATGGCCTCTTGGGTCTGGACTCCAGTGGAAAGCCTTCAG  
[A, T]  
GCCTCACCCCTCAGGGTCAGCTGTAGTCCCTGGTGGGAGGGCAGAAGAGCTGGGCTGCCTCT  
CCTCGATCATTCCCATAGGGAGTGCCAGCAAACAGGAAAGACCTGGGCACTGATTACACA  
GGAGCCTGACGGATGGAAGGCAGGCCAGCCCTGAGGTGAGTGCCTTGGGGTGAGCACGTC  
ACCTTACCAGAACCATGGCTCCAGGGGGAGTAGAACGAAATAGATGACAGAGGCTCTG  
TCGGGAACCTCTGTGGGGACAGAGGGTCTGGAACAAAGGAGGATATAAAGAACAAGTTC

212286 CTGTCTGCCAGGGAAAGCTTCTTACATCCCCAGCTTTGTGAGCCAGTCCAGCTCTCAG  
CGGGAGACTCACTTCCTGGGATGTGTGAGATCCAGCTGCAGGGCTGTGATGCTGTGAGGC  
ATTGATAGGGGATTTAGTGTAACCTCTGCTGGAGCAGTCCCTATAGCAAGAGGTGCTGGGG

CCTGTGGAAGCATCAGGGAGGCCAGGCTGATGGGACAATGTGGCACGTGCTCAAGGGCA  
 CTGCTTTGGCACGTGAGCTTTCTGTGCCTCATTACTTCATCTGTAAAATGGGGATAATA  
 [A, C]  
 CAGCACTTACCTCATAGAGTGTGTGAGTATGACAGGAGCAGCACCTGGCATGCAGTGAG  
 CATTCTTCTCTACGCAGTGTCAACAGCACTAGGGATGATGCTGGTGCCGTTGTAACATCA  
 CGGCTTATTCAAGGAGCAGATGCAACAAGCTGTAAAGACCTTGGCCATTTATGTGACAAC  
 TCTGTAATGAGCTAAGAGGTGAGGGGTGGTGGGTCTCTGTGAATGAGGGGAGAGAAGA  
 ACATTGGCCCTCCATATTTATTTAATGAATGACTAGAAATTTGACCTCCAGTTGATCAAAG

212767 TCTGTAATGAGCTAAGAGGTGAGGGGTGGTGGGTCTCTGTGAATGAGGGGAGAGAAGA  
 ACATTGGCCCTCCATATTTATTTAATGAATGACTAGAAATTTGACCTCCAGTTGATCAAAG  
 TTAATGATCACCTTCTCTGTCTTGCTAAGAGATGTAAGGAGCCACCCAAGTTTATCTAGC  
 AGGTTAGTAGAAAAGCAAGGGGAGAATCAGGTATCTCTGATCCCCAGTCTGGACAAAGCT  
 CCTAGAATGTACCTCCGGGCTCTCAGGAAATGCCAGTGGAGCCTGGGGTAAGAATTCATC  
 [T, C]  
 GCCTGAAGATGAGAACGTTTGTAGAGAAGGTGCTGGAGGAGAGGGGACCTTCAAGGTGGATT  
 TTGAAGAGCAAGGGAAGGTTTGCTAGGTTGAGAGTGTGGGGAAGGCTTTCTAGGAGTACA  
 GGCATGAAGTACCTCCAGTCTCCGGGAAGAGCAAGTGATTATGGGATCCTGGGTGTAGGG  
 GAGAGCATAGTTGGGGATAAAGGCAGACAAGTGGATCACAGCAAGCTGGGGAAAGGCCTT  
 GTGTGCCAAGCAGGGAAGTCTGAAGTCAAGCTGACCAGTGTGTGTCCAGAATTGGTGGG

212809 GAATGAGGGGAGAGAAGAACATTGGCCCTCCATATTTATTTAATGAATGACTAGAAATTTG  
 ACCTCCAGTTGATCAAAGTTAATGATCACCTTCTCTGTCTTGCTAAGAGATGTAAGGAGC  
 CACCCAAGTTTATCTAGCAGGTTAGTAGAAAAGCAAGGGGAGAATCAGGTATCTCTGATC  
 CCCAGTCTGGACAAAGCTCCTAGAATGTACCTCCGGGCTCTCAGGAAATGCCAGTGGAGC  
 CTGGGGTAAGAATTCATCTGCCTGAAGATGAGAACGTTTGTAGAGAAGGTGCTGGAGGAGAG  
 [G, A]  
 GGACCTTCAAGGTGGATTTTGAAGAGCAAGGGAAGGTTTGCTAGGTTGAGAGTGTGGGGA  
 AGGCTTTCTAGGAGTACAGGCATGAAGTACCTCCAGTCTCCGGGAAGAGCAAGTGATTAT  
 GGGATCCTGGGTGTAGGGGAGAGCATAGTTGGGGATAAAGGCAGACAAGTGATCACAGC  
 AAGCTGGGGAAAGGCCTTGTGTGCCAAGCAGGGAAGTCTGAAGTCAAGCTGACCAGTGT  
 GTGTCCAGAATTGGTGGGTCTTGTGTCTCTGACTTCGAGAATGAAGCCGCGGACCCGC

213100 GGAGGAGAGGGGACCTTCAAGGTGGATTTTGAAGAGCAAGGGAAGGTTTGCTAGGTTGAG  
 AGTGTGGGGAAGGCTTTCTAGGAGTACAGGCATGAAGTACCTCCAGTCTCCGGGAAGAGC  
 AAGTGATTATGGGATCCTGGGTGTAGGGGAGAGCATAGTTGGGGATAAAGGCAGACAAGT  
 GGATCACAGCAAGCTGGGGAAAGGCCTTGTGTGCCAAGCAGGGAAGTCTGAAGTCAAGCT  
 GACCAGTGTGTGTCCAGAATTGGTGGGTCTTGGTCTCTCTGACTTCGAGAATGAAGCC  
 [G, A]  
 CGGACCCGCGCGGTGAGTGTTACAAGTCTTAAAGATGGCGTGTCCGGAGTTTGTTCCTT  
 CTGATGTTTGGACGTGTTTCAAGTCTTCTCTCTGTTGGGTTCTGTTGTTCTCGCTGGCTT  
 CAGGAGTGAAGCTGCGGACCTTTCGCGGTGAGTGTTACAGCTCTTAAGGCGCGCGTCTGG  
 AGTTGTTTCAATCCTCCCGCTGGGTTCTGTTGTCTCGCAGGCCTCAGAAGTGAAGCTGCAGA  
 CCTAAGGCAGTGCAGACCCAAAGAGTGAGCAGCAGCAATATTTATGCAAAGAGCGAAAG

215017 GCTGGGCGGGGCTTCCCTGCTCCGAGGTCATTAAGAAGCCAGCTGCACCTTCTCCAGGG  
 AAAGCTGGCTCAATCATCCCAAACCTCACAGAGCTTCTGGACATCAGGAAACCAGACCCCTT  
 GTCTCCTTTCTAAGGAAAGAGTAGGAACTGAGGGATACCCAGAAGGTTACCAGGGGAAC  
 CTGGGGTCAAAAGCAGGCAGAGCCTCTGGGGACAAGCCTACCTTCAGCCTGGTCTGGCCT  
 TGGAAAGCTGGCCTCCACTTTCTCTCCAGACTCCCTTTCTGTCCCTCCAGTTGCCCTTCC  
 [A, G]  
 CTTCTGGGCTACCCACATTTCTGTCCAGTAGCCGCTGTTGTTCTTTTCAAGTCTTTGCAAA  
 GGGATCTCTCTGTCCCGACCCCTTCTCTGGCCTTCACTTTAAGCTCCACAGAAGAGGGT  
 TTGGCTGTTTTCTGCCAAGCCACTCACCTTCACAGACATCTGCTGAATGCCCCACTTGGTG  
 CTAAGGCTGTGCCAGGACCTGAGGATACCAGTATGATCAGAACACCGGCCTGACCTCAA  
 GGAATTTATAGCCAAAAGAAAGCCACACATCTCCACCCTCTGGGTTATCCTTTGGGAGC

215021 GGCGGGGCTTCCCTGCTCCGAGGTCATTAAGAAGCCAGCTGCACCTTCTCCAGGGAAG  
 CTGGCTCAATCATCCCAAACCTCACAGAGCTTCTGGACATCAGGAAACCAGACCCCTTGTCT  
 CCTTTCTAAGGAAAGAGTAGGAACTGAGGGATACCCAGAAGGTTACCAGGGGAACCTGG  
 GGTCAAAGCAGGAGAGCCTCTGGGGACAAGCCTACCTTCAGCCTGGTCTGGCCTTGA  
 AGCTGGCCTCCACTTTCTCTCCAGACTCCCTTTCTGTCCCTCCAGTTGCCCTTCCACTT  
 [C, T]

TGGGCCTACCCACATTTCTGTCCAGTAGCCGCTGTTGTTCTTTTCTAGTCTTTGCAAAGGGA  
 TCTCTCTGTCCCCAGCCCTCTTCCTGGCCTTCACTTTAAGCTCCACAGAAGAGGGTTGG  
 CTGTTTTCTGCCAAGCCACTCACCTTCACAGACATCTGTGAATGCCCCTTGGTGCTAA  
 GGCTGTGCCAGGACCTGAGGATACCAAGTATGATCAGAACACCGGGCCTGACCTCAAGGAA  
 TTTATAGCCAAAAGAAACGCCACACATCTCCACCTCTGGGTTATCCTTTGGGAGCTGCT

215180 AAGGTTACCAGGGGAACCTGGGGTCAAAAGCAGGCAGAGCCTCTGGGGACAAGCCTACCT  
 TCAGCCTGGTCTGGCCTTGGAAGCTGGCCTCCACTTCTCTCCAGACTCCCTTTCTGTGTC  
 CCTCCAGTTGGCCTTCCACTTCTGGCCTACCCACATTTCTGTCCAGTAGCCGCTGTTGT  
 TCTTTCAGTCTTTGCAAAGGGATCTCTGTGCCAGCCCTCTTCTGGCCTTCACTTTA  
 AGCTCCACAGAAGAGGGTTGGCTGTTTTCTGCCAAGCCACTCACCTTCACAGACATCTG  
 [C, T]  
 TGAATGCCCCTTGGTGCTAAGGCTGTGCCAGGACCTGAGGATACCAAGTATGATCAGAAC  
 ACCGGGCCTGACCTCAAGGAATTTATAGCCAAAAGAAACGCCACACATCTCCACCTCTG  
 GGTATCCTTTGGGAGCTGCTTTAGCCAGAGATGCCTCCAAGACCTCAAGGACAAACGGG  
 AATCTTTACAGACTGTCTCTCATGTTGGATACCCTCTCCTCACTCCTCCGCGGATTCTGT  
 CAGCATCTGTGAAAACAACCTAGGACTTCACTGAACTGACAGTTCACATAGCCCCGTAG

215370 TTTGCAAAGGGATCTCTGTGTCCAGCCCTCTTCCTGGCCTTCACTTTAAGCTCCACAG  
 AAGAGGGTTTGGCTGTTTTCTGCCAAGCCACTCACCTTCACAGACATCTGTGAATGCCC  
 ACTTGGTGCTAAGGCTGTGCCAGGACCTGAGGATACCAAGTATGATCAGAACACCGGGCCT  
 GACCTCAAGGAATTTATAGCCAAAAGAAACGCCACACATCTCCACCTCTGGGTTATCCT  
 TTGGGAGCTGCTTTAGCCAGAGATGCCTCCAAGACCTCAAGGACAAACGGGAATCTTTAC  
 [A, G]  
 GACTGTCTCTCATGTTGGATACCCTCTCCTCACTCCTCCGCGGATTCTGTGTCAGCATCTGT  
 GAAAACAACCTAGGACTTCACTGAACTGACAGTTCACATAGCCCCGTAGTCCAGCATCC  
 CTGGGAGCTCAGTTGTCCCATTACAGTATCTGCTTCCAGGATCAAGAAAAGTGACCTAA  
 AACAAATATGTGTGTTCTTTGGATATTTCTCCAGGTTTTATGCAAGGAACGTCTTGGT  
 GTGAGCACCCCGCAAATGTGCAAGAATATTATCAGTTCGGCATGTGTGGTGTGCTCCACA

215412 TCACTTTAAGCTCCACAGAAGAGGGTTTGGCTGTTTTCTGCCAAGCCACTCACCTTCACA  
 GACATCTGCTGAATGCCACTTGGTGCTAAGGCTGTGCCAGGACCTGAGGATACCAAGTAT  
 GATCAGAACACCGGGCCTGACCTCAAGGAATTTATAGCCAAAAGAAACGCCACACATCTC  
 CACCCTCTGGGTTATCCTTTGGGAGCTGCTTTAGCCAGAGATGCCTCCAAGACCTCAAGG  
 ACAAACGGGAATCTTTACAGACTGTCTCTCATGTTGGATACCCTCTCCTCACTCCTCCGC  
 [G, -]  
 GATTCTGTGTCAGCATCTGTGAAAACAACCTAGGACTTCACTGAACTGACAGTTCACATAG  
 CCCCCTAGTCCAGCATCCCTGGGAGCTCAGTTGTCCCATTACAGTATCTGCTTCCAGGA  
 TCAAGAAAAGTGACCTAAAACAATATGTGTGTTCTTTGGATATTTCTCCAGGTTTTAT  
 GCAAGGAACGTCTTGGTGTGAGCACCCCGCAAATGTGCAAGAATATTATCAGTTCGGCA  
 TGTGTGGTGTGCTCCACAGAAGTGTGTACTTTGAATGAATTAATTACATTCCAGTAATT

216552 TCTTGACAGCTGCTTCCAGGTCTTTCCCTGGGGCTCTCTCTCACAGTTCAGCCATGCC  
 TCAAAGACCCAGACTGTCCCACGAGCAAAGACCAACCATATCTTCATCCCTGACCTCTC  
 CTCACGTTTTCAGTCTACCTCTCATTCCACTGGGATGGTCCATCCCAACCATCATCTCCTG  
 GCTGGATGACCTCTATGGCCTCCTAGCTATTCTCTGAGCCCCGGGTGAGTGTCTTCTCA  
 AATCCACTTTCCATATGGCATTAGAGTAAGCTTTCCAAGATGGAACCTTGACCATGGTG  
 [C, T]  
 TGTCTGTGCTCGAACCCTTCTGTCCAGTTGTTTCAGCAATATTCATGTACTATGCGTCAGAT  
 ACTATTTGGAGATGTGGGACACAGCAGGGAACAAACAGAGCCAGTCCCATGGCAGG  
 TACAGTCTTGTGGGAGAAACAACAGTAAACAAGAGATGAAGTCTATGTGATGGTGACAA  
 GTGCCATGGAGCAGAATAAAGCCAGGAGGGCAGTTAGCCAGAGCCTCTGATATGAGAAGT  
 GACATTTGGGCAAAGGTCTGCAGCAGGCCGGGGGTTAGGGAGTGAGGCATTTGAATATC

217007 AGATGAAGTCTATGTGATGGTGACAAGTGCCATGGAGCAGAATAAAGCCAGGAGGGCAGT  
 TAGCCAGAGCCTCTGATATGAGAAGTGACATTTGGGCAAAGGTCTGCAGCAGGCCGGGGG  
 GTTAGGGAGTGAGGCATTTGAATATCTGGGGGAAGAGTATCCAGGCAGTGGAATACAA  
 AGTTTGCAAAGATCCTAAGGTAGGAGCTTGCTAGCGTGTTTGGGGGCTCACAAGGGGCG  
 CAGAGTTGCTGGACCAGGTAAGTAAGCAGAGAGAACTGAGCAAGTCGGAGGGCTGATG  
 [A, G]  
 GGTGATCTCCCATAGGGCTCTGTGCGCCATTGGAAGCCCAAGTCTTTGCCACTTGGC  
 TATATTGCCCTTCTCATTAAGTCCGTGAGGCCACCCAAAGTGGCCTTGATGAGGGGAGG  
 GAGTGACATGGAGCCTCTCCCAAGGCTTCTCCGACAGGAGGCTGTTTGAAGAGGCCCTG

TGTGGACAGGAGGGGTGCCGGTGGCTCAGGTGCTCAGATCCATGTGAGTGGACCCATATGC  
 CCAACACTCGAGAGGTTTCAGATGATCACCAGGAGCCAGATGTTTAATTACTGGAGCAAG

217549 CAACACTCGAGAGGTTTCAGATGATCACCAGGAGCCAGATGTTTAATTACTGGAGCAAGA  
 AGAAGTTGATTTGGGACTCCTTTAAGGTTCTCCCTATCGTGCCTTCAATTAAGATCAAG  
 GCGCCCGTGTAGCAGCCGCTAAATGACACCATGTATTGAATCTCTGTGCTCAAGCAGTTT  
 GTCTAATTATCTGTGTGATAGACTCAGCAGCTGTCAGACCAGCCACAACCTCAAATACGTG  
 GTCTCTGTACGCTGCCTCAAAGTGTTCCTATGCCACTAGCAAGCTCAAGGACAGGACTT  
 [A, T]  
 CATGCTCTTTTCTAGATGTGGGATCCCTTTTCAGGTTCTCTGCTGCCTAGTGATATAAGG  
 CATTGAAGGGGCCAGTGGCTGGGAGGACAGTGGGTACAAGAATTGAGCAGAGGCTGGGG  
 GCTCGGCTGTTCCCTCCCTCGCCCCAGCCCTTGTGCCTCGCATGATCACTCAGCCTCTCT  
 GCCTGCTTTTCTGGACAGGGAAGCAGTGACCCAGTTTGGGCCATCTTCTCAAAGAGAGG  
 GAGGAGCACTTGCCACTGTGTCAAGTTAACTGAAATAAATGAGGGGGATCAGGAGGCAGT

217567 AGATGATCACCAGGAGCCAGATGTTTAATTACTGGAGCAAGAAGAAGTTGATTTGGGACT  
 CCTTTAAGGTTCTCCCTATCGTGCCTTCAATTAAGATCAAGGCCCCCGTGTAGCAGCCG  
 CTAATGACACCATGTATTGAATCTCTGTGCTCAAGCAGTTTGTCTAATTATCTGTGTGA  
 TAGACTCAGCAGCTGTCTAGACCAGCCACAACCTCAAATACGTGCTCTCTGTACGCTGCCT  
 CAAAGTGTTCCTATGCCACTAGCAAGCTCAAGGACAGGACTTACATGCTCTTTTCTAGAT  
 [A, G]  
 TGGGATCCCTTTTCAGGTTCCCTCTGCTGCCTAGTGATATAAGGCATTGAAGGGGCCAGTGG  
 CTGGGAGGACAGTGGGTACAAGAATTGAGCAGAGGCTGGGGGCTCGGCTGTTCCCTCCC  
 TCGCCCCAGCCCTTGTGCCTCGCATGATCACTCAGCCTCTCTGCCTGCTTTTCTGGACAG  
 GGAAGCAGTGACCCAGTTTGGGCCATCTTCTCAAAGAGAGGGAGGAGCACTTGCCACTG  
 TGTCAAGTTAACTGAAATAAATGAGGGGGATCAGGAGGCAGTGACCCAGGGGAGAGTAA

218100 TGCCACTGTGTCAAGTTAACTGAAATAAATGAGGGGGATCAGGAGGCAGTGACCCAGGGG  
 AGAGTAAATGACTGCTCATCTCCATCAGCAGAGAGTGTCTTCAGGAGTAAACACTTCCCA  
 GCAGAGCAGGCTCATTGGATGAAGGAGGAACAAGACCACACCAAACAACCTGAATGTAAGG  
 TCTGTGGAGTTGAGTCTCAGCCAGGAGAACTGAGGGACAGAACTACAGAAAGCTGGGGC  
 CCAGCCCTGTACAGCATCCTGGGTCTCCGGGAACCAACCCATGCTTCCTGATTGTAGGTGA  
 [G, T]  
 CTTGTGCCCAGTCTGTCACCTGGGTGCCTCATGAGGGCCAGATCCAGAACACATGTATTCT  
 TCCAGGCTAATGAGGGAAGACAGAGCTTAACAGTGACTACTGAGTTTGGACATCTCCTAG  
 AGAGTTCTTCCCTCTGCTTTTCTTCTTGTGTGCTCATTTCTGCTTTGATGCATTTTGAT  
 CACTTGTTAATGAAAGTAATCAGAGTGAAAACTACTTTCAAAAAGCTCCTCTAAAGGAAA  
 GTAGCAAAATCACTTTGCTTGCAGGTAATTAAAATAGCCAGATGCAGTGAACCTCCGTCCA

219737 CTTTGGGGAAAAATTATTACAAGAAACAGAAGCTCATTTTACAGCAACTGTGTTCTAC  
 TCCCAATGCAAGAAAACATGAATCTGAAATGAGATAAAAAATGGGATTGTAAATTGGCT  
 GAGCCACAGTCAAAAATAAATGGAAGCTGGGGGAGGTAAGGAAAGAATATAAAGAACCT  
 GAAATACAATTGCAGAAGTTCCTTCTCCACTTCAAGCAGTCAAAGGAAAGATTAACCAT  
 CAGAAATCATAGTTGTTCCAATACAGGGAACAACTTGAAACCGCTCCCCAAATACACC  
 [A, G]  
 AGAATGAGAAGAAGATTTAAAAATACTGTGGGAGAGGATGATAGTTATGTAAGACAGAG  
 ATAAAAGATTTAAAAATAATAGTATTGGTTATCTTAAAGACCTCAGAGCAATTCAAATGG  
 ACACAATAAGCAAAGAGAGATCCAAAAATAAGTGCCCTATACTGAAAGATCTATCAAA  
 TAAGTCAAAATATAATTGCTGACATTTTAGGTTTTGAAAAAAAATAAAGTGATCTGA  
 AATATCCAGAGAGAGAAAAACAAGCAGACAAAAAAAAGTCCTACCTGGTGTG

220681 TTCTACAGAGAAATCAGAGAATCTGACAAAGAGGAACCTCAAGGCTTAGGTGAGCACAGAG  
 GCTCTTGAAATGAGAAGGTGTCTAAATAACTTTTCAAATATAGTTACCAAAAATTGCAA  
 AGGGTAAATGATGAGGTTAAGTGCGCTTAATTTTCTTGACTGACTTATTGGAATTTCAAC  
 AGATCCTGCATAATCCTTGACTCGGTATGTTAAAAGCATACATGAGGGCAATATTCCAT  
 CAGAGCCCAGAACAAACCTCATGCAGCCCCAGACAAGTGTCATGGCTGTTCCAGGTGA  
 [C, T]  
 CTGGGAGACTTCACCTCCTGCCCTTCACTGGTGTATCCAGAGACCATGGGAAGGATCAGCC  
 ACTGACTGACGTGTTTCGACCTACGGTCGGGCCTCCCCGTGCCCTTCATCTCGGTGGCTAGA  
 GTGTGCTCCCCAGAAAGCATGCAGGGCTACAACCTGAAGTGGAAGAAAACCGCAGCGGGTC  
 ATAGTGTGCTTCTTCTTGTGTGATGAAGCCTTTGTTTCATGGGCGTGTGTGATGCCAGT  
 GACATGGTCAGGACAATTGGGAAGGCCTGAACCTATTGGTTCTAATGTTGCAGTCAATACA

221225 ATGGTCAGGACAATTGGGAAGGCCTGAAC TATTGGTTCTAATGTTGCAGTCAATACAATG  
TGATTAACCAATTAGAGAGAAATGCATAAGAGCCAAATTCTGTTGCCAAGAAAAGGCAAA  
GAAGGTAGAAGAGCTGCCCTGTTAAGAGATAGAGGTAGAAGTTCAACCCCCAAGGCAATA  
AAGGGCCACCATGGGACACAGCCTTGCAGAAAAGAAGGAATGGCCATCAGGGTGGGGTGG  
ATAGGATCATGGGAAATACACATTCTCATTACGGAGAATGTGCCAGGCTGCCAGCCCAC  
[C, T]  
GCCAGGGGCTGTATGGACGTCATCTCATGCACTCCTTTTCCCTAGTTGGTGTCTTACTGAGA  
GGCAAAGAGAAGCCAGATAACTTTCCAGTTACTGGACTTGTAATGACGGCACCAGTAC  
TGGCACCTGCCCATCCCCTTTTCAGTGTGTGTGTCAGTGGCCACTCCCATGATTAGGAGAGAT  
ATTTGTGTCAGGGAGTGGGGCTTGACCTGAACCTGGAAGAGTGGGTGGGTGGGACATGAACA  
ACCAGGTACAGGGCAGGGGCAGCAGCAGAGGGAAAGACTTCATGCAGCTTTGCTGATGTT

221960 CCAGTTGTTTTAATGAAATGAATCACATTTACACCCATCTTGTCTTTGAACTTCAGTGGC  
TGTCTCCACGTGGCTATGTGACGTGACAACCCAGTGAGCACATTACAAAGGAAGAAAGT  
CCCCGCCAATGCCACGTGAAACACAGGGTGAGGGCTTCGTTGCACAGGAAGAAAACGTC  
CATATTTCTCGGTACACCTTTCTGTCTCTCCACTTCTGCCTGGGTTTCTTCTCGCCAGT  
GTCCCCACCTCTGCCCCCTGCCAAATTTTCAGTGACATGAAGATCTCGTTTATGTGCCAGG  
[A, C]  
TTGTCTCAATAAACATTCTCCTAGCAATTTTAAAGGAACAACTTTCCATATTAATAA  
TTTGTGGTTCTCAGGGTAACAACCTGTGGGTATCAGGAAGACCTGAAGAAATGGGGAATC  
TATACAAAAGGAAGGCAAGTCCACTGCTGAGAAATGTGGTTTCTCTCTGTAAACATGC  
TGACAGAAGCCCATATACTAATTTAGAGAAACAGTTGGCACAAAACAAGATGCACAGTTG  
AGCGTGCTGTCTAGAAGGCTGGGAAGGAAAGAACTTGAGTGAAGGCACCACCAGGATTC

222673 ATGAGAATGGAGGGCAGGGTAACAAC TAACTCAAAGAGCCCATGTGACATGCCAGGTCCA  
AGGCTGAGCATTCTGTGCACTTTCTGTTCTTTAATTCTGTGACAGCCCTTCAGGGTAAGG  
ACTGTTATTACCCCTAACTTGGCAGGTGAGGAACTGAGGCTCACAGAGGTTTAACTGACT  
TGCCCAACACCACTCAACCGGTGAGGAGGAGAGCTGCAATAAAGACTGATTTGAAATGTT  
AAATGTTGCTTTGCTCTGTCTGCTCTGCCACATCTCTTACATGTATAATTTAAAAA  
[A, C]  
ACACACACATAGTGATTATCATTACGCAACTGGGCAGATTGTGCCTGCACTCTCACTT  
GTGTTCTGAAGGCAACTTTCTGCACGTGTAGCTGACATGTGCCCGTGTGTTAGCCACTC  
TTGACTCGACAAAGAAATGTGATGGTTTTTGAAATCTTTGTTTCTTTGTTGTTTTGT  
TCCTTCTACTATGCCACACTGTCTATGTATATAATGATTCCTGTAATTAATAAAGGAAGG  
AGGCCTTGCACTGAGCACCTGCGCAGTCTCTCCCTTTTTCAAATTAGCAAAAAGCCGGG

223053 CTGCACGTGTAGCTGACATGTGCCCGTGTGTTAGCCACTCTTGACTCGACAAAGAAATT  
GTGATGGTTTTTGAAATCTTTGTTTCTTTGTTGTTTTGTTCTCTACTATGCCACAC  
TGTCTATGTATATAATGATTCTGTAAATTAATAAAGGAAGGAGGCCTTGCACTGAGCACC  
TGCGCAGTCTCTCCCTTTTTCAAATTAGCAAAAAGCCGGGGACTATGTATGGCTCACCT  
CAGAGGAGCCAGTGGACAGGGTGGGCTCAGGACCGAGCTGCTAACTAGATTGCTGCCAG  
[T, C]  
GGACTCAGCCTCTGTGCAAGCCATGTTGGGTTCTAGGGGGACAGGAGCCTGTGGGGCAG  
CCCCAGATGGCAGTCTTGAAAAGGAATTCAGGGTGGGTGTGATCAGGGATAGAGCTTCT  
CTAGTGTACATCACACAGGAACCCATGAGTGGTACCGGCATGTGCTCTAAACCTCATCCT  
GCCTGTTTGTTCACACTCCTGAGGATAGTAAAGTAGTGGTCCCTGTTTTCAACACTGCAC  
CGATCAAGTTTCTATTCTTGTGTTTCACGATTTCATAGAAAGATCTGTGATTCTTGCTATCT

223881 AAGGAACAGGGAGGCCTCCAAAAGGGGGTGCCATCTGGACTGAGTACTAAATGATGAGAA  
ATGGGTTAGAGAAAGAGGAGGGGAGTCTTCTAGGCCAAGGGTTAGGATATGAAGCCAGCA  
TGGGGAGCCACAAGCCAATTGGTGTCTTCCAAATATAGAGTTTAGGGCAGAGAGAAAGC  
AGCAAGGGCAAGCCTGGAAGGAGCTTTGGCCAAAGCTGGGGCCAGACCTGGACCATCAGG  
TTAAGGAGTGTGGAATTTCTCCTGGATGCAAGGGGAGGCAGCATTCTAGGGTTTTAAACC  
[A, T]  
TAGGCCTGGTGTTCAGAAAGATCACCTGTGTTGCCCTTGGGACAGAGTGACCCTGGAGGC  
AGGGGCCAGCAGGAGGCATCGAGGACATTCAACAAAGCCACACAGAAGCCTGAATCGGG  
GGAGTGGGCAGACCGGAGAATCACTTAGGAAAAATACAGTCAGCAGGACCAGGCACTGAT  
TGTGAAAATTAACCATCACACCTGCCACCCAGGATGGTTCTAACTGCCTTCTCCATC  
CTTAGCCAGTCTCGTCTAAGCAGAAGTACAAGTCATCTCAGCGAGGCTGAGTGAAATC

224236 GGAGGCAGGGGCCAGCAGGAGGCATCGAGGACATTCAACAAAGCCACACAGAAGCCTGA  
ATCGGGGAGTGGGCAGACCGGAGAATCACTTAGGAAAAATACAGTCAGCAGGACCAGGC  
ACTGATTGTGAAAATTAACCATCACACCTGCCACCCAGGATGGTTCTAACTGCCTTCC

TCCATCCTTAGCCAGTCCTCGTCTAAGCAGAAGTACAAGTCATCTCAGCGAGGCCTGAGT  
GAAATCCTTCAACTGACAAGAGCCAAGTTTCCCATTTGGGCTGGGCCCTGAACAGTCCTG  
[G, T]  
GAAAGTGTAGCCCTTTCGTAGGGCGCACCCCTGTCACCAACCCGCTCTGGAAAGCGGGCCA  
CTGACTCAGAAAGGAAATGTGGCTTGGATGCCGAAGTCAGAGTGTGATTCTCCTACCCCTG  
TGGCTCAGTCCCTGTCTGGACTATAGATGGATGGAGTGTGCACTCTAGGGTCATTGCA  
CCTTCCTTTTCTGAGTTGCAACCTCCACCTCCAGTACGCAGGGGTTCGCGAGGAGGGTGG  
GGAAGCAGCTTGATTCCAGAAGTCTTTACCTCTCTCATCCACCAGCCTCAGAGGTGCTT

224238 AGGCAGGGGCCCCAGCAGGAGGCATCGAGGACATTCAACAAAGCCACACAGAAGCCTGAAT  
CGGGGGAGTGGGCAGACCGGAGAATCACTTAGGAAAAATACAGTCAGCAGGACCAGGCAC  
TGATTGTGAAATTAACCATCACACCTGCCACCCAGGATGGTTCTAACTGCCTTCCTC  
CATCCTTAGCCAGTCCTCGTCTAAGCAGAAGTACAAGTCATCTCAGCGAGGCCTGAGTGA  
AATCCTTCAACTGACAAGAGCCAAGTTTCCCATTTGGGCTGGGCCCTGAACAGTCCTGGG  
[A, G]  
AAGTGTAGCCCTTTCGTAGGGCGCACCCCTGTCACCAACCCGCTCTGGAAAGCGGGCCACT  
GACTCAGAAAGGAAATGTGGCTTGGATGCCGAAGTCAGAGTGTGATTCTCCTACCCCTGTG  
GCTCAGTCCCTGTCTGGACTATAGATGGATGGAGTGTGCACTCTAGGGTCATTGCACC  
TTCTTTTCTGAGTTGCAACCTCCACCTCCAGTACGCAGGGGTTCGCGAGGAGGGTGGGG  
AAGCAGCTTGATTCCAGAAGTCTTTACCTCTCTCATCCACCAGCCTCAGAGGTGCTTTT

225653 AGATGGTACCTGGGAAGCACCTGCTGAGCCCACCAGGGTCTGGGCTCTGGAATGGCCAGG  
AGGAAGTGCAGGATGTGGGCCACAGGAAGAGCTGTGACTGGGAGACATTTGAAACTCAGG  
GTAGGACAAAAATCAGGGTGGGCCGGGCTTGGCCAGCTGGGGAGTAGCTGGTCATGCCAAT  
GGAGAGGTCAATTCAAAATGGGCCAAGGAGTAACATGTCAAGTAAAGTCCATGTGGGCACG  
CAGAGCCTGTCCAGCCACCTGAATATCCACCAGGCAGTTGCACGCTCTGTTCTCTCCTTC  
[T, C]  
CCCCCCCCCTTCTCTCTCTCTCCCTGTCTCTCTGTGCCCTCTTTCTTTCCCTGTACT  
CCTCCTCATCTTCTCACCTCCTATTTTCATTTCCCTTTCCGTCGCCCTCCCTGTGAGGTCT  
GACTTGAGTGTGCCTACACATATCTAAAACAAGTGAAGTGAATAATGTGTTTCTCAGTTA  
ACTGGGAGTATGTATTACATGGTGCAAGCTACTAGTTCTATGTTGAGGGAATTAAGCAGT  
TTCCCTAGCAGAGTTGAGACAGTCTGAAATAGATGATCACCATGCTCCCAGCATCAGG

226563 AACAAGTGCAAAACCTCGGCACCCAGTAAAAGTTTCTCACTCACGCAGTACATCCAGCA  
TGGGTCCGCAGGGGCTCAGCTCACAGACCCAGGCCACATGGCCTTCTGCAGTCAGTGAT  
GTAGGGAAGGCCAGGCATCTGAGAACCAGGAGGATTTTGGCAGGAGGGTTTGGCAGGAGA  
GGCTGAGCAAACCTCCTCCGTGAGAGGGTGTCTCTCCCCACCTCTTCAGGGGGTATCTGG  
GCAGACCTGTCTGAGCCCACCATGGTCTGGGCTCTGAGATGACCAGGAGGAAGTGCAGGA  
[G, T]  
GGGGAAGGGGATGTGAAGAGGGAGTAAACCCCAAGGTAGAGCCTGGAATTGACACACAT  
TCACTTAAACCCCATTTCTTGGAAAAGTAAGTCACACAGCCACAGCTAACTTGGCTAA  
CTTTCTCCTTGGAGGACAGAGGCCCTGCTTCCTCATGTTCTCCTCAGTCCACGGCATCC  
CGGCCAGCGTGTAACTAGAGTGAGGGCTGAGTGCTCATAGGAACGCTTGAACACACAA  
CCCTGCACATAGCTGTGTCCAGTGCAAGGCTGACCTACTGGCATATTCATAGAATTGGA

227365 GGAGGTGACCACTGTCCGTTCTGTGATAATCATCTTCCAGCTTTCTTTATAGTTATCTAA  
ATTTATATTCTATAAATGTGTCTCAACATGGTTTACTTTCTCTGTTTTTGAAGTCCATAT  
AAATGGAACCATGCTGCGGGTGTCTTTTTCAGATTTATTTCTTACACTCAGTATCTGATT  
TGTAAGACTAGTTTCATATGGGGTATAGTCATACCTTGTTCTTTTCATTCTGGATATCCC  
CTTGATAACTATGCCACGATGTATCCATTCTGCTGTTGACAGCCAGCATTGGGTTAAT  
[G, T]  
CCCATTTGGAGATATTCCAAGCTGTGCAACTGGAATCATTCTTGGATATGTCTTCCTGTG  
CACCTGTGAAAGTGTTCCTCTAGCGTGTACTCTAGGCACTGTACTTCACTCTCCTTTCTA  
GATATCACCATACTCTTTCCCAAATTTGTGACCAGCTTTCCTTGGAAACAACAGTGTGT  
GAGTTCCCATAAATTCATATTCTTACTAACCTTGTGACTATAAAACCCCTTTTGGACAAA  
ATGCTTTTTCTGCAACTACTGAGGGTTTTGCCCTTTTTCTATTGTTTATTACGGTAATT

228457 AATTTGTCCAATTCATCAAAGTTGTCTAATTTATTGGCATATACTTGTTCATACTCTTCC  
CTTATAATCCTTTTTTATTTGTAAAGTCAGTAGTAATATCATCCTCCTTACTATTTTTAG  
TAATTCGAGACTTCTAAAAAATTTTTTGTAGTCTAGCTAAAGGTTTTGTCAATTTTGT  
TGATTTTTTTTTTTGAAAGAACCAATTTTGGGTTTTGTGAGTTACTCTATTGCTTTTTCT  
ATTCTTTTTTCATTAATTTCCAGTTTAACTTTTACTACTTGCTTGCCCTGCTTGTTTTG  
[G, A]

TTTAGTTTGCTCTTCTTTTACTATGTGTTATGGTGAAAGATTAGGTTATTGATTGAAA  
TTTGTTTTATTTTATTTTATTTTTTTTTTTGAGATAGAGTCTCAGTCTGTCAACAGGCTGG  
AGTGCAGTGGCTCACTGCAACCTCTGTCTCTCAGGTTACGCCATTCTCCTGCCTCAGCC  
TCCCGAGTAGCTGAGACTACAGGCGCAAGCCACCACCCAGCTAATTTTTGTATATTTA  
GTAGAGATGAGGTTTCACCATGTTGGCCAGGATGGTCTCGATCTCTTGACCTTGTGATCC

228488 TATTGGCATATACTTGTTCATACTCTCCCTTATAATCCTTTTTATTTTGTAAGTCAGT  
AGTAATATCATCCTCCTTACTATTTTTAGTAATTCGAGACTTCTAAAAATTTTTTGT  
AGTCTAGCTAAAGGTTTGTCAATTTTGTGATTTTTTTTTTTGAAAGAACCAATTTTG  
GGTTTGTGAGTTACTCTATTGCTTTTCTATTCTCTTTTCATTAATTTCCAGTTTAATCT  
TTACTACTTGCTTGCCCTGCTTGTTTTGGGTTTAGTTTGCTCTTCTTTTACTATGTGTT  
[A, G]  
TGGTGAAAGATTAGGTTATTGATTGAAATTTGTTTTATTTTATTTTATTTTTTTTTTTGA  
GATAGAGTCTCACTCTGTCAACAGGCTGGAGTGCAGTGGCTCACTGCAACCTCTGTCTCT  
CAGGTTACGCCATTCTCCTGCCTCAGCCTCCCGAGTAGCTGAGACTACAGGCGCAAGCC  
ACCACACCCAGCTAATTTTTGTATATTTAGTAGAGATGAGGTTTCACCATGTTGGCCAGG  
ATGGTCTCGATCTCTTGACCTTGTGATCCGCTGCCTCAGCCTCCCAAATGCTGAGATT

228531 TATTTTGTAAGTCAGTAGTAATATCATCCTCCTTACTATTTTTAGTAATTCGAGACTTC  
TAAAAATTTTTTGTAGTCTAGCTAAAGGTTTGTCAATTTTGTGATTTTTTTTTTTT  
GAAAGAACCAATTTTGGGTTTGTGAGTTACTCTATTGCTTTTCTATTCTCTTTTCATT  
AATTTCCAGTTTAACTTTTACTACTTGCTTGCCCTGCTTGTTTTGGGTTTAGTTTGCTCT  
TCTTTTACTATGTGTTATGGTGAAAGATTAGGTTATTGATTGAAATTTGTTTTATTTT  
[A, G]  
TTTTATTTTTTTTTTGAGATAGAGTCTCACTCTGTCAACAGGCTGGAGTGCAGTGGCTCA  
CTGCAACCTCTGTCTCTCAGGTTACGCCATTCTCCTGCCTCAGCCTCCCGAGTAGCTGA  
GACTACAGGCGCAAGCCACCACACCCAGCTAATTTTTGTATATTTAGTAGAGATGAGGTT  
TCACCATGTTGGCCAGGATGGTCTCGATCTCTTGACCTTGTGATCCGCTGCCTCAGCCT  
CCCAAATGCTGAGATTACAGGCATGAGCCACTGTGCCTGGCTGTTTTCTTTTAAATGT

228665 TTGGGTTTGTGAGTTACTCTATTGCTTTTCTATTCTCTTTTCATTAATTTCCAGTTTAA  
TCTTTACTACTTGCTTGCCCTGCTTGTTTTGGGTTTAGTTTGCTCTTCTTTTACTATGT  
GTTATGGTGAAAGATTAGGTTATTGATTGAAATTTGTTTTATTTTATTTTATTTTTTTT  
TTGAGATAGAGTCTCACTCTGTCAACAGGCTGGAGTGCAGTGGCTCACTGCAACCTCTGT  
CTCTCAGGTTACGCCATTCTCCTGCCTCAGCCTCCCGAGTAGCTGAGACTACAGGCGCA  
[A, C]  
GCCACACACCCAGCTAATTTTTGTATATTTAGTAGAGATGAGGTTTCACCATGTTGGCC  
AGGATGGTCTCGATCTCTTGACCTTGTGATCCGCTGCCTCAGCCTCCCAAATGCTGAG  
ATTCAGGCATGAGCCACTGTGCCTGGCCTGTTCTTTTTTAAATGTAAGCATTAAATAGCT  
ACAAGTTTCTCTAAGCACTCCTTTACTACATCTCATAAGTTTGTACGTTGTGTCTCT  
TATTTTCATTATCAATCAAGTGTATTTTCTCTTGTAAATTTCTTATTGACCATGTTGTTA

230490 TTGATATCATTTCTTACTCCAATACAGTTTTGCACCCACCTACATCCTTTGTGCTATTA  
TTTTCAAGTATGTTATATTTCTGTATGTTATAAGGCACAATTGTACAGTTATAACATATT  
ATTTTATACAATTGCTTTTAAAAATCAGCTAACAAAGAAAGGAGAATAAATGTATATTTATA  
CTGTCTGCTATAAATTACATAGTTATCTTTGCCAGTGCTCTTTTTTTTTTGGTGATAGTG  
ATTACCATCTGGGGTCACTTGCTTTCAGCCTAAAAAGCTTCTTTCACCTTTTGTAGAGTG  
[A, G]  
GTATGTAGCAATGAATTATCTGTTTTTGTATCTGAGAATGTCCTTATTTTGCCTTCGT  
TTTTGAAAAGTGGTTTTGTGGATATACGATTCTTTGTTTACAGTTTGTTTTTTAGCAC  
ATTGAATATGTCATTCCACTGTCTGCTGGCTTCTTTAGCTTCTGACAAAAAGTCAGCTGT  
TAATCATATTTGAAGTTCTTTGTACACGAGTAAAAAATAATTTGTTGCTGCTTCAAAT  
TTTTCTCTTTGTCTTTGTTTTCTATATTTTGTAGAGTGACCTGGATCTCTGTGTATA

230976 ATATTGAAGTTCTTTGTACACGAGTAAAAAATAATGTTGCTGCTTTCAAATTTTTTC  
TCTTTGCTTTGTTTTCTATATTTTGTAGTAGAGTGACCTGGATCTCTGTGTATATCTTC  
CTTGAAGATTGTTGAATTTCTTGATGTACTGATTAATTTTTTAATCAAATTTAGGAAGT  
TTTTAGCCATTAATCCTTCAAATAATTTTCTGTTCTCTTTCTCTTTTCTTTTCTGGTGCT  
TCTACTGCACATATGGTGGTGTGCTTAATGGTGTACACATTTCTCTGAGGCTTTGTTCA  
[T, -]  
TTTTTTTTTTTGGTTTCATTTCTTCCCTAGTAACTAGCTGTCTACAGTCTAGCTTGTT  
GCTCTCATGGAGCTACCAGCCTCCTCTTAATTAATTACCACCAAATGTTCAATGTTTTTA  
AGAGTACTTTTAGGCTCAAACCTCCTCATACTCTGTTCCAAATTCCTCTCAGTCAGAGCT

FIGURE 3, page 167 of 188

CTCCATTTTAATGGCCTGTCTCGCCCCATGGCCAAAATCTCCAAGCCACTGCTCCAGAGT  
TTGGTGTGGGCATAATGGCCCAGTTCTCTTAGAATGACAACCTTAGTTGTAATTC TAGCC

236111 TCCCCGCTGGAGGCTCAGTTCGCACCATAAAATGCCACATTTGATATGCAGATTCCCTGA  
ACTCTCCAGAGAGGAGCTGGCTACCCAAGGGGAAACAAAGGCTGTTCAGAATGTGTCTGG  
ATCCATTCCCCCATAAGTGATGTTAACTAAACACAAACAGCTCTCTTTCATCGGGCTG  
GTTTTATGGCTCCCACTCCAAGTGTGCTTGGAAATGTGGTTGTCTCATTGGCTTTTTTA  
CTACCTTTAAAAGTTCCTTTGCAGAAGCCTGTTGGCTGGCTTCCTGCTGACTCCAGGGCT  
[T, C]  
GTTGTGGAAAGGCCTGGAAGGTTGGCGACTAGGAGCCTTGGGCCATGACCCAGTCCTAAT  
ACCAAGGTAAACACTGAGCTCAGTTATGTGTTCTCTCCTTGGTGTACGTGCTTAGGGGG  
ATTGTGTTCTCTCCTTGGTGTACGTGCTTAGGGGGGAAAGACTAGGATCACACACAGTCTAAAAAC  
TTTATTCCACAGGACAATAAATTTTAAAAAATAGATAGATAGATAGATAGATAGATACAT  
ACATACATACATACATAGATACATAGATACATAGATACATAGATAGATAATCCCCCTGCC

236317 GCTTGAATTGTGGTTGTCCTCATTGGCTTTTTTACTACCTTTAAAAGTTCCTTTGCAGAA  
GCCTGTTGGCTGGCTTCCTGCTGACTCCAGGGCTTGTGTGGAAAGGCCTGGAAGGTTGG  
CGACTAGGAGCCTTGGGCCATGACCCAGTCTTAATACCAAGGTAAACACTGAGCTCAGTT  
ATGTGTTCTCTCCTTGGTGTACGTGCTTAGGGGGATTCTGACACACAGGTGACCTCCAG  
GGGGCAAAGACTAGGATCACACACAGTCTAAAAACTTTATTCCACAGGACAATAAATTTT  
[A, -]  
AAAAATAGATAGATAGATAGATAGATAGATACATACATACATACATAGATACATAG  
ATACATAGATACATAGATAGATAATTCCCCCTGCCAGTCTCTCAAATCTCAGCATGAAGCAT  
TATCTCCCTGGCGGGAGAAACATGAAAACGTCTCCAAAGCTGATGGCCCTTTACCTGGA  
AGTTTGATGAGGTGTGTTTGGCAGCCCCAGCAGGCAGATGTTGCGCCTGTGGGTGGGTGA  
CAGGGAGGCCAATTTCAAATGCCCTGCTTGTGTCAGTGTGTCATGGATTTC AATTCCTCTCTCC

236323 AATTGTGGTTGTCTCATTGGCTTTTTTACTACCTTTAAAAGTTCCTTTGCAGAAGCCTGT  
TGGCTGGCTTCTCTGCTGACTCCAGGGCTTGTGTGGAAAGGCCTGGAAGGTTGGCGACTA  
GGAGCCTTGGGCCATGACCCAGTCTTAATACCAAGGTAAACACTGAGCTCAGTTATGTGT  
TCTCTCCTTGGTGTACGTGCTTAGGGGGATTCTGACACACAGGTGACCTCCAGGGGGCA  
AAGACTAGGATCACACACAGTCTAAAAACTTTATTCCACAGGACAATAAATTTTAAAAAA  
[T, -]  
AGATAGATAGATAGATAGATAGATACATACATACATACATAGATACATAGATACAT  
AGATACATAGATAGATAATTCCCCCTGCCAGTCTCTCAAATCTCAGCATGAAGCATTATCTC  
CCTGGCGGGAGAAACATGAAAACGTCTCTCCAAAGCTGATGGCCCTTTACCTGGAAGTTTG  
ATGAGGTGTGTTTGGCAGCCCCAGCAGGCAGATGTTGCGCCTGTGGGTGGGTGACAGGGA  
GGCCAATTTCAAATGCCCTGCTTGTGTCAGTGTGTCATGGATTTC AATTCCTCTCTCCTGGAAG

236325 TTGTGGTTGTCTCATTGGCTTTTTTACTACCTTTAAAAGTTCCTTTGCAGAAGCCTGTTG  
GCTGGCTTCTCTGCTGACTCCAGGGCTTGTGTGGAAAGGCCTGGAAGGTTGGCGACTAGG  
AGCCTTGGGCCATGACCCAGTCTTAATACCAAGGTAAACACTGAGCTCAGTTATGTGTTT  
TCTCCTTGGTGTACGTGCTTAGGGGGATTCTGACACACAGGTGACCTCCAGGGGGCAAA  
GACTAGGATCACACACAGTCTAAAAACTTTATTCCACAGGACAATAAATTTTAAAAAATA  
[G, -]  
ATAGATAGATAGATAGATAGATACATACATACATACATAGATACATAGATACATAG  
ATACATAGATAGATAATTCCCCCTGCCAGTCTCTCAAATCTCAGCATGAAGCATTATCTCCC  
TGGCGGGAGAAACATGAAAACGTCTCTCCAAAGCTGATGGCCCTTTACCTGGAAGTTTGAT  
GAGGTGTGTTTGGCAGCCCCAGCAGGCAGATGTTGCGCCTGTGGGTGGGTGACAGGGAGG  
CCAATTTCAAATGCCCTGCTTGTGTCAGTGTGTCATGGATTTC AATTCCTCTCTCCTGGAAGCA

236345 TTTTTACTACCTTTAAAAGTTCCTTTGCAGAAGCCTGTTGGCTGGCTTCCTGCTGACTCC  
AGGGCTTGTGTGGAAAGGCCTGGAAGGTTGGCGACTAGGAGCCTTGGGCCATGACCCAG  
TCCTAATACCAAGGTAAACACTGAGCTCAGTTATGTGTTCTCTCCTTGGTGTACGTGCT  
TAGGGGGATTCTGACACACAGGTGACCTCCAGGGGGCAAAGACTAGGATCACACACAGTC  
TAAAACTTTATTCCACAGGACAATAAATTTTAAAAAATAGATAGATAGATAGATAGATA  
[G, C]  
ATACATACATACATACATACATAGATACATAGATACATAGATACATAGATAGATAATTCC  
CCTGCCAGTCTCTCAAATCTCAGCATGAAGCATTATCTCCCTGGCGGGAGAAACATGAAAA  
CTGTCTCCAAAGCTGATGGCCCTTTACCTGGAAGTTTGATGAGGTGTGTTTGGCAGCCCC  
AGCAGGCAGATGTTGCGCCTGTGGGTGGGTGACAGGGAGGCCAATTTCAAATGCCCTGCT  
TGTGTCAGTGTGTCATGGATTTC AATTCCTCTCTCCTGGAAGCAGTTTCCACCATAAAAATGGTG



236534 TCTGACACACAGGTGACCTCCAGGGGGCAAAGACTAGGATCACACACAGTCTAAAACTT  
TATTCCACAGGACAATAAATTTTAAAAATAGATAGATAGATAGATAGATACATAC  
ATACATACATACATAGATACATAGATACATAGATAGATAATTCCCCTGCCAG  
TCCTCAAATCTCAGCATGAAGCATTATCTCCCTGGCGGGAGAAACATGAAACTGTCTCC  
AAAGCTGATGGCCCTTACCTGGAAGTTTGATGAGGTGTGTTTGGCAGCCCCAGCAGGCA  
[C, G]  
ATGTTCCGGCTGTGGGTGGGTGACAGGGAGGCCAATTTCAAATGCCCTGCTTGTCTAGTGT  
CATGGATTTCAATTCCTCTCTCTGGAAGCAGTTTCCACCATAAAATGGTGAGCCTTCCA  
ACAGCTGGGGCTGCCTTTGCAATGGGCCTCCCGGTGATGAAGTGGGCTTCCCGTCCCTGG  
GAGTGGACAAGCAGCAGCCGAGGCTGTTGGGGAAGAGGCGGAGGAATTTCTGCCCCGGGA  
GCGACGTCTGACGATGAGGAGTCCCTCCAGCTCTAACAGACAGTGTTCATACCTCAGTGT

238076 ATGGGTCTTTGAACTCTGGCTTTCTTCTTCTCTCATTCTGAAACCACCCCTCTGTC  
TCTGAGGGCGAGGCTGCCTGAGCCTCTGACTCACTGCTGCCTCACACCTGCCTACCCCTT  
CTCCCACTTTCCACAGCACCCTCATCCCTCATTCCTTCTCTCCAGCTGGCGGGACAG  
GAGTCCAAACCCCAAGACTGCCCAAGACCATGCTTCAGGACCCATGCTGCCCTTCCCGG  
AGCCTGTCTCTACACAACCTCTGCCTAGGAAGCCAGACCACACAGGACCCTGAGCAGCTG  
[A, G]  
CTTGCTGGGAGAACTACTGTCTGTTTCCCTTCAGGCCTGGGACCCCTGTCTTACTTTG  
GGTATCCTCCAGCAGGCTTCTGCCCAGCCATGGCTAATGTTTAAAAAAAATTAGGAC  
TCTCCACAGGGAGAGGCTCCTTAAATAGGATCCAGATGCTTCACTTTATAGAGAGGCTGG  
CCTGCAGGCAGATACCAAGTGAGGGGCCATCTCAGTCTCAGCCTGTCTCCCTGCCACAG  
CCAGCCTGCCAACCACAGCTGCCATATTCCAAGCGACCTTGTCTTCTCAGCGACAA

239545 AGGAGCAATGAGCCAGGGAGGGGATTAACAGAGGGACCGCCATGCTGCAAATTAGCAA  
GATACCAGCTGCCAAATGTAACAACTTGTGTAATTGGCTTTTTGTTTTATTAAAGAGGCAT  
GATTCTCTTTAGCCAAGCCTCAAATGCCAGATGGGCATTAACTTTGGAAGATACAGAGA  
TTAACAATTAACAAGAAAAGGACAGACTTGGGTAGCTTTGGAGGCTGGTGGTATTCAGCAG  
GCCATGTGTGGGTGTGCCTGCCAGAACCCTGCATGGAGACCAAGCCAGCCTTGAAGTCC  
[G, A]  
TCCCTGAGGCTTCTTCTGCTCTATTGGGATGGGTACCTACATTTGGCTCAAGACTGACTTTT  
CCCAGCATAAGACAAACTGAATCCCTGAAGCACCGTCTGCTGAAAATCCCTTTATGCA  
GAAAAAGCCAGTTGGCACTAGGAAAAGTCCCTGGCCTGCCAGCTGATCTTTATTCACTGAA  
ATAGAATTATTAGAATGGGCTAGATGACAAACCAACATGTCCACAGTTGGGGGACAAAGA  
GGGGACCAAGTAGACTTTGGCTTGGAGGGTCCAAGTACATCTGACAGCAAGGCCAAGGGC

247765 AGACTTGCTCTCGGCTTCAAGGGCTCAGAAAAAGTTAATCTGATGTTCTCCTGACTCTGG  
GTCATTTAACTCATTTCTAAATGGGTTTTCTTGCTCAGAGCAGAATTCGAGGTTTGTA  
ACTCCAAGAAGAGAAAAAAGGTCTACACAATTGTGTTATTGTGATTGAACAGTTTTAT  
TCTCAAAGATTTAATTTCCCAAATTTTGCTTTAGGAATACACGGTAAATGCAACACACGG  
TAAGATGGCAATTAAGCTCCCTGCGTTAGGGAGTATCACTCACGGTGATAATTGGGAAAC  
[A, G]  
TGACAGAGAATGGGACGCGCCATCTCAGAAGAGACGAAGAGGCTTTTCAATTACTCTGGA  
ACTTTATTTATTATTTTTGAAGGGTAATGCATTGCCGCTCTTAAGTGTCTGAAATTAAG  
TGGACGTTGAAAACATAGCCCTTCTATGAGCTTATTTTTATTCTTACTGAGCATAATTGG  
ACAATATAAAAAGTTTACTTTTAAATGTGTCATCTCTTGTCTTTTAAACTGTAATCA  
CATCAATAGGAACCTTGTCTGTGAGATTTTATTGCTTTGTCTAGGTTCCCTTTCCAGCCT

250858 GATAGCAGGTGGCCCTGGGTCCACTGCACACTTTGCCAGGCTGAGCTGACCACAGACTGG  
CTAGCATGGCTGGAGTCTATGCCCAGCCCAAGCCGACTGGTCTCCTGAGTGGGCACCA  
GCACTGACTGTGCTGCCTCTGCCCAGACTCAGCTAGAACAGGAGTGGGCTGAGAAGCTGG  
GGGCGGCAGAGCCCTCTGGAAGGCCCCAGGTGTTTTGTGGCCCTAGCACACTTCTCCTTT  
GGGGACCTCAGCATGGGTGTCTCCGAGCCCAAGTCAACTACTTTGGCCTCATTTTAGGGG  
[T, G]  
TGTGGGGGGTGCTAGGGAGAGAGGCCAGAAGGAGTAAATCTTAAGAAATGAGGTAGGCAA  
GAAACCTGGGTCTGCAGAGCCTGCAGAAGCCAATGAAGCAATGAAAGGGCCCTGTAGGTT  
TGGAAGCAAATGGCCGTTCTCACGGTTAAGTTACTTGGGAAGAATTCCATTTGCTTTAC  
AAGGGATGATGTACGCTTTAAGCCTTAGCTGAAATCAGCCCTTCTAACTGTAACAGA  
CATTGATAGGCCAAACACAACATAGAAATTGGCTCCCTGGCTCCCAATCCCTGTCCCTTTT

251536 AGAGGAGCTTCTGCCTTGGGGGCAGAAGAGAGGGAAGAAAGTGAAGGAAGTGTCTCCAGT  
CTGGAGGAGGAGACAGAGAGGCCAACGGGAGTTCTCTAGGGGCAGGGCAGGGCACGGG  
GACAGCACAAACAGGAGGGGGACTGAGACTCTGCCAAAGGATCAGAGTTGCTCTTCCAAG



TTGTCTCAAGGCCATCAGCTAGAGGACTGGTGCTGTGCCCTTAGTTATACCAGTATCTAT  
 GGATTGGTCTCATGGATTCCCTGCCCAGTGCCCGCCCTTTGCCCACTCTCTGAGGCCAC  
 AGGAGGGATGAGTTCAAACCTCTGTTTACAAGGAGCTTACGTGGTCTCATTGAGGAAGTAA  
 AAGGAACTGCCAGTTACTGCTGGGTGTGGATTCACTTTACTTCTCAGTGAGACCTGGGC  
 CTGGGCCACCAAGGCTCTCCAGGATGTCTCTGCATGTCAAACTTCAATGCACACTCAA  
 254076 TCTCACTCTCTGGTGGAAGATGGTGCTCCCGGGGCTGCAGGTGTGATGTAGGTGACGTG  
 AGATCTGCATGGGCACAGCTGTGGCCTTTGAATTATAAGATTGTCTCAAGGCCATCAGCT  
 AGAGGACTGGTCTGTGCCCTTAGTTATACCAGTATCTATGGATTGGTCTCATGGATTCC  
 CTGCCCAGTGCCCGCCCTTTGCCCACTCTCTGAGGCCACAGGAGGGATGAGTTCAAACCT  
 CTGTTTACAAGGAGCTTACGTGGTCTCATTGAGGAAGTAAAGGAACTGCCAGTTACTGC  
 [T, C]  
 GGGTGTGGATTCACTTTACTTCCTCAGTGAGACCTGGGCCTGGGCCACCAAGGCTCTCCA  
 GGATGTCTCTGCATGTCAAACTTCAATGCACACTCAACCACGAGGGCTGAGCTGGAGG  
 AGCTTCCAGGCCATCCAGTCATCTCCATCCATCTTTGAAACATTATGGAACCCCTTT  
 TAGAACCAGCTGATCACATTCCCATTTTACGCAATAGGGATTGTGCGCTCCTCTGTGCGAG  
 GGCCAAATGGCGCTGGCTCATGCGTGTGTCAATTCTAGCCCTTGTCTCTTTCCACCCTGG  
 254547 GAACCCCTTTTAGAACCAGCTGATCACATTCCCATTTTACGCAATAGGGATTGTGCGCTCC  
 TCTGTGCGAGGGCCAAATGGCGCTGGCTCATGCGTGTGTCAATTCTAGCCCTTGTCTCTT  
 TCCACCCTGGTAAGGCCTTAAGGGCTTCCACCTGGTCCGTAGCATCATCAACTCCCTGT  
 GCTTTTTTTTTCTTTTTTGGCGCTATCTCTCCATCCTTATAATAGTCTGTATAATAGGG  
 GTCAGTTTACAGATGCACAACTAAGGTTCTGGGAGGATAAGTGACCTCTCTGAGGCCAC  
 [G, A]  
 TAGCAGGAGCAGAATTAAGACCGGATGCAGCTCCTGACCCTGCGGCCAGTGAGAATAGC  
 TGCAGGGGCTGTTTTTCAAAGCCACCCCTTGACCTCTGCCCCAGTCTCAGTAACTCTG  
 GCCTGCCTGTCTCAGCAGGGAAGAGCCAAGCAGGATGAGCACTGCCCCCGCATGTCCAG  
 AACGCTGTCCAGCAGCTCAGGGCTCCTGCCGCTGCTCAAAGAACTGGCCTCTGGGAAGT  
 GCCACTGCAACCCAGAGGCCGTGGTGAACAAAGCCCCGAGGCAGCATGCCTCCTTCTCT  
 254892 GCCAGTGCAGAATAGCTGCAGGGGCTGTTTTTCAAAGCCACCCCTTGACCTCTGCCCC  
 AGTCTCAGTAACTCTGGCCTGCCTGTCTCAGCAGGGAAGAGCCAAGCAGGATGAGCACT  
 GCCCCCGCATGTCCAGAACGCTGTCCAGCAGCTCAGGGCTCCTGCCGCTGCTCAAAGAA  
 CTGGCCTCTGGGAAGTGCCACTGCAACCCAGAGGCCCGTGGTGAACAAAGCCCCGAGGC  
 AGCATGCCTCCTTCTGCTTCTGGGGTGTATTATTTAGATGGCAACTGTGTGTGTGCGCT  
 [A, T]  
 GTGTACAGTTATTTTTGTCTTTGGCCTTATGGCCTCTGCTATAACACTGTCAGGTGGCAA  
 CTTTTTAAGAAAAAATTTAGAAAAATTTGATCCAAATTGATGACTCTGGTTGTCCAC  
 CCCCACCTCACCTAGCTCTGTCCCTCATTTTCTACAACATTCCCTCATTTTCACTCCTAG  
 TTATTTCCATCTGAGAAATGGTGCCCCACACACTCTCCTGCCAACTCCAGGGGAGGGCA  
 GGAGGAACGCTGGGGCTCTTTTGGGGTGTGGAAGGACCCCTCGCAGCCCCCTTCAG  
 258431 GAGGTAGTCAACCCTGAGAGCCTGAGGCTGGAGGGAAGATCTGCCCATGCTGTGTGGGCC  
 CTTTCGTCAACAGCGGGTTCTCATGGGGCTGGACACAGAGGGGCAGACTGGGGCCCCAGC  
 GGGCACAGCAGTGTGTGTCCTCCAGAGGGGTTTGTCTCAGTGCCCTCTAATAACCATCACT  
 CTTGGTAAGTGTATGACACTATCTCCAAGAACAGAAAGACATATAGTCCATCCCATGGG  
 TCTTTTACAGTCACATAGCAGCATGACAAACAAAGTCCATCCTATGGGTCTTTACAGTC  
 [G, A]  
 CATGGCAGCCTGACAAACATAAAGTCCATCCTATGGGTCCCTTTACAGTCGCATGGCAGCA  
 TGACAAACATAAAGTCCATCCTATGGGTCCCTTTACAGTCGCATGGCAGCATGACAAACAA  
 AGTCCATCCTATGGGTCCCTTTACAGTCGCATGGCAGCATGACAAACATAAAGTCCATCCT  
 ATGGGTCCCTTTACAGTCGCATGGCAGCCTGACAAACAAAGTCCATCCTATGGGTCCCTTTA  
 CAGTCGCATGGCAGCATGACAAACATAAAGTCCATCCTATGGGACCTTTACAGTCACATG  
 261462 ACCCAGGAGGCAGAGGTTGCAGTGAGCTGAGATCACACCACTGCACTCCAGCCTGGGCAA  
 CAGAGACTCTGTATCAAAAAAGTAAAAATAAAAAAGATTAGAAGTCAAGAGGATTGGGTG  
 GGGTCACCTGTACGCTGCCAGGGAGCATACTAACTGAGCCTGCTGTGTGACACACCTC  
 CCGACAGAGGGAGTTACACGCGAGCCCTCCAGGGGAAGAGACAGAGACCTACACAGCCA  
 CAGGCAATGCACACCGGTGTCTACTGCCTGCACTGATCAACCCATCATGCACAATGCAGC  
 [G, A]  
 GACAAACGGGGATCGTGAGACATTTTGAAGAAAGCCAAGAGCACAAAAGGGAAGAACCAAC  
 AGGAAGGAAAAGAGCAACTGGCTGTGGGGGATAGGGAACAAAGGAAAAATTTTTAAATTT  
 TTAATCTAATAAAAAAAACCTTTAGAGGGACTTGATAAACATTTCCATAAAATAAGA

ACAGGTTGTTATGAGAAAGGAAAATAGCCCAAGAAGTATTTCTTGGAAATTA AAAATGCA  
GTCACCAACATTAAACCTTCCATAGAAGGAGCCGAAGAATAAGTCAAGGAAGTATCCAC

262167 AACAAAGAACTTAAAGAGCAGGAAATTACCAAAGGAATAACAGAAGAAACTCCCCAGAG  
CTGAGCTAAGATATAGACCTTCAAAAAGAATGACCCACTGAGACAGAAGCAGGGGGAAT  
GAAAAAAGACCCACAGTTGTATAGTTGCGTATCCTCTTGATATTTCAGAACATTAGGAT  
AAAGAGAAGATTCTCAAAGCTTCCAGAGGTAAAAGACAAGTTATCAACAAAGGATCAGGA  
ATCATTGTTGGCAGATTGGCATTAGCAACACTGGAAGGCAGTGAGGTAATTGCCTTCACA  
[G,T]  
TTCTTTTATTTTTATTTTTATTTATTTATTTACTTTAAGTTCTGGGATACGTGTGCAG  
AACGTGCAGGTTTGTACATACGTGTACATGTGCCATGGTGGTTTGCTGCACCCATCAAC  
CCATCATCTAGGTTTTAAGCCCGCGTGCATTAGGTATTTGTTCTAATGCTCTCCCTCCC  
CTTGCCCCCAACCCCTGACAGGCGCAGTGTGTGATATCCCTCCCTCTATCCATGTG  
TTCCCATTTGTTCAACTCCCCTTATGAGTAAGAACATGTGGTGTGTTGTTTCTGCTCCT

263806 CTAATTGGGAGGCTGAGGCAGGAGAATGGCGTGAACCCGGGAGGCGGAGCTTGCAGTGAG  
TGGAGATCGTTCCACTGCACTCCAGCCTGGGAGACAGAGCGAGACTCCGTCTCAAAAAA  
AAAAAAGAGTGGGGCATGGAGGGTGAGGAGTGTAATCCAGCAAGACAGAAAAGGAA  
CCTAGAAAGAAAGAGCTGGTCCAAGAAACAGAAGAGCTAAGCCAGGTATCCAGTGAA  
CAAAACCCCGCAGGACTTGTGGGACAACCTGTGTAAGAAACCTGGGAGAGAATCCATTCA  
[A,C]  
GTTAGAACAGAAAGTCAGAAGGTTCTGAAAAGCAAGTCTTCAAGAAGAAAGTTAATTCCA  
TTGAACAAAAATAAGATGAAGAACTGGAAGACCTCAGAGATATGATGAAGAAATACGTAT  
GTGCTATCCCTCAATAAATTTTTAAGGCAGTTAAAAATCTGGAGAAGGCAAATTGCTA  
AACCAGAAAGACATCATAAAATATTAAGCAAATAAAATATGTCACGATTTTGAGCAATT  
AAAGGAAGATGAAGAAAGAGAACAATTTAACTATGAAGCTTAAAAATAATCTCCTTCAAAC

265167 GAATTAGGACTTGCAAGTAAACAGAAACCCAGTAGATGGGAACTGCACCCTTGATAAAA  
TGTCTCTTACTGCCTTGAATACAACCAACATCACCAACACAGCCCCCGCTATAAAA  
AACTTTTTTTCAATTATAAGGTCAGAGTCTTCTTTCAACTGCGCTAAGCAGTTTGACCAA  
AACGTGTATTTCTGATATGTGTGGTTTTGGAAGACCTAAGATTCTCAAGCCCCAGGGTTC  
AGAAGGATGCCGAGTGTGTTGAAAAGTCTCTGTATTCCAGCTTCTGTATGAAGCTGCC  
[A,G]  
AGTTGCTCAGGTGTTCCAGGAACAGAGAGGTGGCCGTGGGCCAGCCTCCCAGGGAGCCC  
AGATGCTGGCTGCAGGCTGTCTCCACACCCGTGCTGAGTGTCCAGCCCAGCCAAGGTATG  
TCTGCTTTCTGTTGGCACCGCTAGTGGCCCTAAGGAGACATTTACATCAGAGCTAGCGT  
CAACCCCTCCCTCTGTCTCTCTCACAGAGGACTCAGAACTTTCTCTCTTCTCCAGAGTTG  
CTAAGGGAATCCGCACCCCTGCTTTACCTCTTGCTAACTGAAATAAAAAAGTTTTCCAGGA

265258 TCACCAACACAGCCCCCGGCTATAAAAAAATTTTTTTCAATTATAAGGTCAGAGTCTT  
CTTTCAACTGCGCTAAGCAGTTTGACCAAAACGTGTATTTCTGATATGTGTGGTTTTGGA  
AGACCTAAGATTCTCAAGCCCCAGGGTTCAGAAGGATGCCGAGTGTGTTGAAAAGTCTT  
CTGTATTCACGTTCTGTATGAAGCTGCCAAGTTGCTCAGGTGTTCCAGGAACAGAGAG  
GTGGCCGTGGGCCAGCCTCCAGGGAGCCAGATGCTGGCTGCAGGCTGTCTCCACACCC  
[G,A]  
TGCTGAGTGTCCAGCCCAGCCAAGGTATGTCTGCTTTCTGTTGGCACCGCTAGTGGCCCT  
AAGGAGACATTTACATCAGAGCTAGCGTCAACCCCTCCCTCTGTCTCTCTCACAGAGGAC  
TCAGAACTTTCTCTCTTCTCCAGAGTTGCTAAGGGAATCCGCACCCCTGCTTTACCTCTT  
GCTAACTGAAATAAAAAAGTTTTCCAGGACAAGTGGCCTGAGCCCTTGTGATGATGCACA  
ATAATCACCCGTGCGACAAGAGCATCCTTCATCTCGATGGGCCGGCAGGGGTGGTCCCTG

267127 CACATAGCTTATAAGTGGCACATTCAAGGTTGACACCTAGGGTTTCCTAAAGGAAGAATT  
CTTCAAGGTGGGCCTGGCAGGACATATGGGATATGGAGAAGCAGAGAGCGGGGCTGGAG  
AGAATGGCACAGAGAGGTGACAGGCCCTGGAGTTAGAACAGAGGTGTTGGTAGGTGGCTG  
TGCTCCCTTGGCAAAAGAGCACCAGACAGAGAGGGGAAGGGTTCCTGTCTGAGAGGTCT  
CCACCGCCTGTCCCTCATCTCTGCTGCTTCTTTCATGCACTCACACAGGGGCTTG  
[T,C]  
GGGAATTCCTAGGACCACGTGCAAGGGAAATGCCAGGAGAAGCCGTGTTCTGGGGTATGA  
GAGCCAGCCGCTGAGCCCAACTCACGTCCTGTGGGAAGCCACCTCATGGTTAGGGAGTCA  
CCTTGACCTTGTCTGAGACCTTAAGTAAATGTGCATGTGTTTGAATTCCTGCACATA  
TTTTTTATGTTTGAATTCCTGCACAGTTTTTTTTTTTTACTTTCCCTAAGTAAAAAA  
AAAAAAGAAATGTGAGCAGGAACCAACATATTCAGTTAACTAGTAAAGTTAATGT

268343 TTATTAGTGGGTGTGCAGAGAATGGGTTTATAATGGTTATTACAACATTTTGAAGTGGCT  
GCCTTGAAGCAGGACAATTTATGTTTCCATTACAGTCACCTTATGAGCACCCACACACA  
CAGTTCTGCCAGGAGGGGACATCTACCCTGGATCCTGTGGACTCCCTGGGATCAAACCC  
TGGAGGTTTCCCTCTGGAGAGAGATTGACCCCAAGAACCTTCCACACACCCCACTCACC  
CCATGCCTCAGAGGGATGAAAATCTGACCACTAAAATTCAAAGAGTATTTCTCTGCCATC  
[C, T]  
GGGGTGCTCCTCCCTGGAGCCAGGCCAGGCAAGGTGCCATTCTGGGCCTTGACTCCTAT  
AGCAATTACAGGACAGAGGTTATCAGCCCCATTTGACAGATGAGGAAATGAGGCCAGGG  
AGAGAAGCCCTGGGCTTCCAGCAAGCAAGCAAGTGGGTGCTGCTCTGCTCTGAGACTCCC  
CATGCCTGGAACACGAGTGTGGGGGAAACAGCACCCACGCCCTCCGGCCTATCCTGTG  
AGCACTCATGCAGGGAATAAGAGCAAAAGAGAGAAGTGGGAGGATTCTCAAACACAGT

268640 ATCCGGGGTGCTCCTCCCTGGAGCCAGGCCAGGCAAGGTGCCATTCTGGGCCTTGACTC  
CTATAGCAATTACAGGACAGAGGTTATCAGCCCCATTTGACAGATGAGGAAATGAGGCC  
AGGGAGAGAAGCCCTGGGCTTCCAGCAAGCAAGCAAGTGGGTGCTGCTCTGCTCTGAGAC  
TCCCCATGCCTGGAACACGAGTGTGGGGGAAACAGCACCCACGCCCTCCGGCCTATCC  
TGTGAGCACTCATGCAGGGAATAAGAGCAAAAGAGAGAAGTGGGAGGATTCTCAAACCA  
[C, T]  
AGTGACTCCAATCCCCATACCTTTTTCACACTGAGTGGAGCTCCCTTCCCCATCTCTGAAG  
AGGAGAACAGACCCAGGTATCAAGCCTGGTCTAGCCAGGGGCAGAGCTCTCAGCTAG  
AGCACCTCGCACTTGGATTTATTTGTCATGGTTTCTCTTCTGCTCTCACCTAGGCAAAGG  
GGTTGGATTTCTACTGGAGGAAAGTTCCAGAGGAAGCAAAAGGAAAGCCTGTGAGCATGG  
AGTATTCTTGTTTCAGTTTACCAAGGGGCTGTCTATGGCAGCCTGGACTCAGGGTCAAAG

269021 ATCAAGCCTGGTCTAGCCAGGGGCAGAGCTCTCAGCTAGAGCACCTCGCACTTGGATTT  
ATTTGTCTATGTTTCTCTTCTGCTCTCACCTAGGCAAAGGGGTGGATTTCTACTGGAGGA  
AAGTTCCAGAGGAAGCAAAAGGAAAGCCTGTGAGCATGGAGTATTCTTGTTTCAGTTTAC  
CAAGGGGCTGTCTATGGCAGCCTGGACTCAGGGTCAAAGGAACTTAGAGGCCATGCAT  
GTCTCAGTAGAAGCAACTCTGGACAAAGCCATGTGTTCTGTTCTTTGTTTATCTGGCACA  
[T, G]  
GTTTGTGAGTGTCTAGTTGTATGCCAGGACCCCATTTGGCTCATGTGATGGTGGGAGGG  
ACATGTGGACAAGTAGAGGAAGCAGAGATGATCGATGTTCTGAGGGGGTGTCCAGGGCTC  
TCAGAATACACAGGAGACTGAACCCAGCCAGGAGTGGTCAGGATAGTGACATGCAGGAAA  
GCCACGTGCCAGCTAAGACCCAAAGCCCTCCACCCCTCCCTCCCTGAGAGCAGGCCTGTG  
CCCAGTTGCCAGAGGTGTCTATTCTGCTCCCTATTTCAGGGTTGCACTACCATGATAGG

269429 GTGTCCAGGGCTCTCAGAATACACAGGAGACTGAACCCAGCCAGGAGTGGTCAGGATAGT  
GACATGCAGGAAAGCCACGTGCCAGCTAAGACCCAAAGCCCTCCACCCCTCCCTCCCTGA  
GAGCAGGCCTGTGCCAGTTGCCAGAGGTGCTTATTCCTGCTCCCTATTTCAGGGTTGCA  
CTACCATGATAGGGCAAAGCAGTCATCATTCATCAGTGACCACGTGTCTTGAGCAGATG  
CTGCAAGCCAGCCCTCTGCACAGCCCCACCGATCTGAAGAGGCTTGAAAGGGGCGGGGG  
[C, A]  
AAGATTCTAGCTGTGGTGTGTAGCCCCAAGGTGATGGTAGGCATGTTTAAGGAACTGAG  
GTGGCGCAGGGTCGCCAGAACGGGTGTGTGAGTGGGGAAGGATGAGGCTGGAGACATAAC  
AGGGCAAGTCAGGGAGGGGCGCTGCTCCAGCCCGAAGGCAGTGGGAGCCCCCATAAGATTCTCC  
GATTCTCCAGCTACTGAGTGGGGGAGGATTGGTGGGGACATGATCGGAGGCATAGTGGT  
CATCCGGGGGTGTTAATGGCTTCTGAACTACAGCAGAGGTGGTAGGAGTGGTGGGAAAC

269739 GCTGTGGTGTGTAGCCCCAAGGTGATGGTAGGCATGTTTAAGGAACTGAGGTGGCGCAG  
GGTCGCCAGAACGGGTGTGTGAGTGGGGAAGGATGAGGCTGGAGACATAACAGGGCAAGT  
CAGGGAGGGCGCTGCCCTGGCTCCAGCCCGAAGGCAGTGGGAGCCCCCATAAGATTCTCTCC  
AGCTACTGAGTGGGGGAGGATTGGTGGGGACATGATCGGAGGCATAGTGGTTCATCCGGGG  
GTGTTAATGGCTTCTGAACTACAGCAGAGGTGGTAGGAGTGGTGGGAACTGGCACCCCT  
[A, G]  
AGAGACACAGTGGTAGAAATGACCTGAGCCAGGACTGATTGGCTGGGGATGGGCAAGATG  
GTGAGGTAGTGCCAGGTGTGCGATTTGGGAAGCAGGGGGCTTGGGTGGAGGGGTGTGCGG  
CTGAGGCTGGGATGTGAAAGAAGGAGCAGTCTTGATGGTGAGTTCATTTGGGCCATGTT  
GAGTTGAGGGGCCTGTGGGACAATGTGGGGAATGTGAGGCCAACAGTGGGGTGGGACAT  
CAGGAGCTCAAGAGAGGATAGTGGATACTGGGCTGGATAGTGAGTAGACACCGCTCCAAG

271247 CAAATGTAATTATTGCTGGTATTCCCATTGGCAGCCAGCTTTCAAGCCAGCCAACTCC  
CTCATTTTATATTTACTTTTAGTCCCACACTATTTTCTGTGATCCATTAGCTCTAGGAAG  
TCATTTAAAAGCTATAATCACGGCGCTTTGCTCAGGTGGATGCAATCCAGATAAATGGAC

CCAGATCCACTCCTCGAAGAAGCCTCGGGCTCCAATTCAGCGCTAATGCACCCCAATTAA  
ACAAGCAGAGCCAGCTGCCCCGTGAGTTCTACCTCATCTGCATTAAAACTAGGGAAA  
[G, -]  
TGTGGGCAAGAGTCCGTTGCAGAGGACGCTTAACAGCCCGCTTCCTAGTTGGAAAATGTA  
CCTTTGGCCTTGCAATTTGGGTACAGGTGCAAGAAGCCCCACCTAGAATGCAATCATGA  
TGTCCTCAATGGTTTGCCTCATCATCTGGTGACGCTGTCTGGAAGTAAGCTTGCCCA  
CCACAGCCCCATGCTGGTGCAAGGGCAGGTTGGGGCTCTGGGCCTTACGGGAGAGGACG  
ATATCCCAATCGAGCACTGTGGGCTGCAGCCCGCCATCCCCGAACACAGGCCTGTGCC

272820 CTGGGATCTAGAGTTACAGTAAGTCCCGGTAGTAATTCACATGCTCATGAATTCACAGAG  
CAGGGTAAGCTATGGGTTGCCTATCTCTGCCAAGCCAGATATTTGGAATGGTTATAAATA  
TCTCCCAGTGTCAAGTAGAGTCCCTCTGCTCCCTCAATGCAAACCACATAGCTTGGGAT  
CCATTAGTTTCATTCCAAATAATTAAAGAAGCACCCTCATGGGTGTGGTGGGTATAAATA  
TCAGAAGGCAAACTCTTCCTGTCCCAAGGATCCCAAGTGTGGTGCATCAGGGCCCATCT  
[T, G]  
CTTGGTGGGCATCACACTGCATGCTGGAGGAAGAATCAGCTTTATAGGGCAGTTAATGTT  
GAAAGTCAAGTGCAGAATTTGGACTCTGATTGCCACCCCCCAAGAAAGGGGAGGGGAG  
AGCTGTTTCCAGGAAGGCTTTCTAGAAAAAAGAAATTGAAGCTGTCCCCAGGGGACAG  
TTTAGGGGTTGATAGGGGGACATTTTCAAGGTAGAGGAGGCCAACCATGCAAGGCCTGGAGG  
GAGGGAGGCTGGGCTGTCCGGGGGTGGCTTGTCTGGCCAGTCAGGCATGACTGGACCATG

274065 TTGAAGGGATGCCAGCCAGGATGGCAGAGTCTCAGGGACCAGATGAGCTGCCGCCACT  
TCCATATCAGTGACCCTCTCTGTGAGCCCCGCACCTTCCCACCCCTCCCCATGTACCT  
AGGCCTGGGCTTGGCTGAGGACAAATACTGTCTACTCAAAGCAACTGCTGTCTTTAGAC  
ATATTGAGAAACATCAGGTTACCTTTTTTAAATAAACATATCATTGAAGCATAACACAGA  
GAGAAATGAATAAGTCATAAGTGTATAGCTCAGTGAACCTCCACAGAGAACATATCTGC  
[G, A]  
TAACCAGCACCCAGATCAAAGACAGAATCTTACCAGTGGCCAGACGCACCCACACCAT  
GCTCTATTCCAGTGTGACCCACCAAGCATACCCACTACTCAGGTGGCCTTTTGAAAGAG  
GAGAGGGCATGACTGTGACAAAGCAGAAGGGTGGCTAACACCAGCACTGCCACTTAGAGG  
GGTGCCAGGTAGAGGGGAAACAGGGAAGAGAGCAGAGGCCATGAGGTAAAGAAAAGCTT  
CATGTGAGTGTGGAAGAGAACGACCCAGTGAGCGTGGCAGGACCCTCGCCAACTGTGACT

276592 AGCAGGCTGGAGTCATTGCGCAGTGTGTGAGTCTAGTGAGAGCCAGCACATCTGCCAAAT  
CCCATCAGGCTGCTGCTTTTCGCTCCTTTCCCGGTGTTTCCAGGGAGTGAGCAGTGCAGATGC  
ATTATGGCTGAGATGTGTCTGGAATCAAACCTCCATCGCTGGAAGAGGAGGGCTTTCTGAG  
CGCTCGGAGGACCCACACCTGGTTTGTGCTTTATCCCCACTGCCAACCTCCCTCGGCAG  
CCCCGCTTCTCACACTGCCAGGCCCTGCATTCTGGATGTGAGCTGAGACCACAGCCTGC  
[G, T]  
CATCAGCTCAGAAGCTTCAGGTTGAAAAACCCACACGTTCCGCTGGCACCAGCTTTTCAC  
AGAAATGAGGGTTTCTGCAGCTCCCTCCACGGGCTGCCACATTTTGATAAGTTTCCCGT  
GTAGATAATCCTCAGAACAGCAGTGCAGGTGACGGGGAAGGAGAGCCTTCTACTCTCCT  
CCCAGAGGCTCAAGCCCTGGAAATACTCCAAAGATCTCCCGAAATGGCTGGTGTTCGCTT  
TCAGAGTTGTGGAGTTTTGTTTTATTTTGACCAGGGATTTACTGTCAATCGTTCAAGTCC

276628 TGAGAGCCAGCACATCTGCCAAATCCCATCAGGCTGCTGCTTTTCGCTCCTTTCCCGGTGT  
TCAGGGAGTGAGCAGTGCAGATGCATTATGGCTGAGATGTGTCTGGAATCAAACCTCCATC  
GCTGGAAGAGGAGGGCTTTCTGAGCGCTCGGAGGACCCACACCTGGTTTGTGTTTATCC  
CCACTGCCAACCTCCCTCGGCAGCCCCGGCTTCTCACACTGCCAGGCCCTGCATTCTGG  
ATGTGAGCTGAGACCACAGCCTGCGCATCAGCTCAGAAGCTTCAGGTTGAAAAACCCACA  
[C, T]  
GTTCCGCTGGCACCAGCTTTTCACAGAAATGAGGGTTTCTGCAGCTCCCTCCACGGGCTG  
CCCACATTTTGATAAGTTTCCCGTGTAGATAATCCTCAGAACAGCAGTGCAGGTGACGGG  
GAAGGAGAGCCTTCTCACTCTCCTCCAGAGGCTCAAGCCCTGGAAATACTCCAAAGATC  
TCCCGAAATGGCTGGTGTTCGCTTTTCAAGTTGTGGAGTTTGTGTTTTATTTGACCAGGG  
ATTTACTGTCAATCGTTCAAGTCCGAGAGGTTAAGATAAATCTTCAAACCTCAGGAAAT

279257 GCGAATATAAAGAAGGCAGAAAAATGTGAAAAGGAGAGACGGGCTGGCCTCCAGCCTA  
CATCTTTTCCAGGCTGGTTGCTTCTGCCCTCGAGCATCAGACTCCAAGTTCTTCAGT  
TCTGGGACTCGGACTGGCTCTCCTTGCTCCTCAGCTTGACAGACGTCTATTGTGGGACCT  
TGTGAGAGCTGCAACAGAACCTGTTACAGGTGTGTAAGTTAATACTTAATAAATAAATA  
TATATATATCTCTCTCTCTTTTGTAGTTCTGGCCCTTAAGAGAACCCCGACTAATACA  
[C, A]

CAGGCCAGCAGAAGTTTTTGTGCAGGATGGTACCGTGAAGGTCAGGATCGCTAGGACCCC  
 TGGCCCCACCCATTAAGTGCTACCAAGGCCCTCCAATCATTGTGACAACCAAAAACATCC  
 CCACAAAATTCCAAAACGCCTCTTGGGGACAGCACTGCCCTTGTGAGACCGTTTATAGA  
 GACTCCTTGCGATGTGCGATGAGTCCATGTGGGAGCTAAGTGCTCCCTTTGCCTGACCCAT  
 CAGCCTCAGTCTGGAGCCAGTAACCTCATCTTGATCACTCGCGGAGGAAGCGACAGCCT

279925 GCTCAAGCTCAAAGCAGCTACATTTCTGGACATCACTGACGCCATTGCCTCGCTGACGCT  
 GAGCAAAGTTACTGCCAGCTCCACAGCCGGCCTTTTCCCCTTAGTTAGATGTTTGGGAGG  
 ATGCAGCCTCCCAAGGAAGTCTTGAAACAAAATTAATAAAAATTAACAGGAGGTGGAGA  
 AGGCACCCACACTCCCATATCCCTCCGACTTCCCTGCCTGGTGACTGACCTCTAGTCCA  
 GCACTACTGCTTCTGCTCTTGGGGCTGGTGACAGGGAGAGTGGGAGGAGGGCTGAGCTGC  
 [T, C]  
 GGACAGGGCAAAGGGGGAGCCGGAGTTTCATAAGAAGCTGTTGCCACCTTCCACAAGGAA  
 TGCTGACCTGTTAGGGAATCTAGCTGGTGGAGGTTTTCCACTAACACAATAGTAAAAAT  
 AAAGTTCTTAATACCAGGAGAGCTTTAGCATTATTTCATGTTTTTCATACAGTGCTCTTTC  
 ACTCTGGGGCCACCTGACAGATCTGCCAGTCAACCATAAAAAGTATATGTGGATCCCTCT  
 CCCAGGGATCCAACCAATTTTGCTTTCTCTAATAGGAATAAAAGAGAGGATTGTAAATGT

280127 CCTCCGACTTCCCTGCCTGGTGACTGACCTCTAGTCCAGCACTACTGCTTCTGCTCTTGG  
 GGCTGGTGACAGGGAGAGTGGGAGGAGGGCTGAGCTGCTGGACAGGGCAAAGGGGGAGCC  
 GGAGTTTCATAAGAAGCTGTTGCCACCTTCCACAAGGAATGCTGACCTGTTAGGGAATCT  
 AGCTGGTGGAGGTTTTCCACTAACACAATAGTAAAAATAAAGTTCTTAATACCAGGAGA  
 GCTTTAGCATTATTTCATGTTTTTCATACAGTGCTCTTTCACTCTGGGGCCACCTGACAGA  
 [T, A]  
 CTGCCAGTCAACCATAAAAAGTATATGTGGATCCCTCTCCAGGGATCCAACCAATTTTG  
 CTTTCTCTAATAGGAATAAAAGAGAGGATTGTAAATGTCAGACAGCAGATTGTATAGCAA  
 CATCAATTGAACCAGGCATTCATAAGCAAATGTACCATTTATCTAACAAAGGTCTGGGTG  
 GTTTTGTTAATTTAAATGACCTGATGCTGGGGTGCAAATTGAGATGAGGCATTGTCTGCG  
 TATTGAGGTGCAAGTGGAGGTGGATATTGCCACCAGCCTTGGAGTCGGCTGGATCTGCTC

280433 AGTCAACCATAAAAAGTATATGTGGATCCCTCTCCAGGGATCCAACCAATTTTGCTTTC  
 TCTAATAGGAATAAAAGAGAGGATTGTAAATGTCAGACAGCAGATTGTATAGCAACATCA  
 ATTGAACCAGGCATTCATAAGCAAATGTACCATTTATCTAACAAAGGTCTGGGTGGTTTT  
 GTTAATTTAAATGACCTGATGCTGGGGTGCAAATTGAGATGAGGCATTGTCTGCGTATTC  
 AGGTGCAAGTGGAGGTGGATATTGCCACCAGCCTTGGAGTCGGCTGGATCTGCTCCAGTG  
 [C, A]  
 AGCACAGCCGGGGAACCAGGCGCAAGGTCTGCATGGCCTCGTGTGTGTTTAACCTGGGT  
 AAAAGGCCATGTCAAGCCTTACACATGCAGATTCTGTTTGTGGTTCCAAAGTGAGCCTTG  
 TACCTTCAACCTAGAAAATTCAAAATTAGCTGAGATGACAAATATGGACACTCCAGGGAA  
 AAGACCAGATGGAACTGACCGAGAATAGTTTGGCAGCCTTGATGCAAGGCCCTCTTTGA  
 ATCCTGGGAGGATGAGGGGCTAAATCTAAGAGGCTGTAACCACCTTGATTTCCTCAGCCA

282808 GAGCTGGGAGTAAATCCTGCTTGTCTTTGCGCAGCTTAGCAGTTTCAAAATAGACCTC  
 AGAATGACACATCACAACTGAGGCCCTGTAAACGCAGCCGCACTGAGCTATATAACATGG  
 GTGCCAGACAATTAAGCCAGGTTTTTGGCTTGGTGGTGAAGATCGAAGCTTTGCTGGGGC  
 AGCAGATGACATGACTTACCAGGCTAATGGGGAAAGTGTGGGAACCAAGTGTGCTAATGT  
 CTGGGGGACAGGCAGCCAAGAGGATGGGGGCATGTCTGTCTCTCCCTGGGCCTCTCTG  
 [G, -]  
 GGGGTTCTCAGGTGAGGTTTGGGGATCTGAGCTCTAGCCACCCTGCCAGGTTGAAGAGGG  
 GCTGGAGCCAGTGACTGCAGCTCCAGAGAGTGGCTGGTTACTATGTGGTTTCTGCAGGG  
 ATGGCCTGTGTCTGTTTGGGAAGAGAGATCCTCACCCATTGTTGGCATTACAGAGCAG  
 ACCCAACATCCCCCACCAGGCAAGTCTTCTTCCCCATGCCTTTGCCCTAGGTCCACG  
 CCCCCTTCCCCAAAGGGATTGCTTCCAGCAGTGGCAGCTGAGCTCTTTCATGATGTTGAG

283120 GTGAGGTTTGGGGATCTGAGCTCTAGCCACCCTGCCAGGTTGAAGAGGGGCTGGAGCCCA  
 GTGACTGCAGCTCCAGAGAGTGGCTGGTTACTATGTGGTTTCTGCAGGGATGGCCTGTGT  
 CTGGTTTGGGAAGAGAGATCCTCACCCATTGTTGGCATTACAGAGCAGACCCACCATCC  
 CCCACCCAGGCAAGTCTTCTTCCCCATGCCTTTGCCCTAGGTCCACGCCCCCTTCCCC  
 AAAGGATTGCTTCCAGCAGTGGCAGCTGAGCTCTTTCATGATGTTGAGCCATGTCCTGC  
 [G, A]  
 TTCCCTCTCCAGTACATTTTGGATATCTTCAAAGGGGGACTCCTGAGAGTAGAGTGAC  
 CCCAAGAAGGGAGATTCCAGCACCCCGGAGACTCATGGGGCTGTGGTCTTATAGTGGCCT  
 GGGGATTCCCCCACCACCTTGACCCACATTCTGCCTGTGTATAAAGCTGTCCCCAAG

AACACAGATGGTCCACAGGGTCGGCTCTGTTTACTGATCAGAGCCGGGGCAAAAAA  
CAGGGTCTTTCTGAAGCTATGCCATAGCCAAATTCATCCACAGGCCTCCTTACCTGGGT

283749 GGCTCTTTCACAGGGTGATCCACGGCTCTCCTGACCAGCAATGCCAAGACAAGAGGGCAG  
AAGCTTTTCTCTCTCTCCAGAAGCAATTCCAGGCAGCTGCCTTGTGCCACCACACT  
TCTATGCAACCTAGTGTCCAGAGACCACCTTCCACCACCCCTAGCCTGGCCATGCTGGA  
GTTCACTCCATGGGAACAGCATTGCAGGTTTTGGGTGTCCCCACTGGGTGAGGTATGGA  
GGTCTGGGCTTCACTGAGCATGGCCACATGTACCACATGGTCAGCATGCCCCCAAGGAA  
[T, C]  
TGACATGATGGGTGACACAGGCACTAGCCCCCTTCAGAGATCCAGACCCGTCACCATGGT  
GCAGGGTGGCTGGGATTGTCTCCTCTTCAGGGCAGGGCCGTAGCCACTCTCCAAGCCCAC  
CTGCCACCTGTCTTCCACAGTCATACCGGTAAACAGACACTGAATGAGCCCCCTTCTATGTG  
TGGATGCTGGGCCAGGTGCTGGGGGTACACCTGTAAGCAAGGCCCCACTGCACTGGAGGA  
GCTCACAGTCTAACAGGGAGCCTGATGATCCACAGTGGATGAAAAAGTCACAGAAATTGA

284339 ACAGAAATTGAAGGCTGGAGAAGGCTGGCAAGAGAGAACAGGGCAGCACACGAGGGTGCC  
CGTTAGGCAGGATTGGTGTGTTAGGCGAGGGAGGCTGAAGGAGTTGGTGAAGAAACACCT  
TGCAGTGAGAGAGTAGGACGGGGCAGCAAGAGAGAGCCCACTTCCCGCCCCACCACCAT  
GCAGGTGCCCTCACCCCTGGGATCCAAGGCTTGGGCCTTGACCACATGGCCTGTCTCCCTC  
TCAGAATCTGAGCTCCCGACAGCCTGTGTAGCACTTCCACATTGCCACATTACACAAC  
[G, T]  
CCTCCCTCCCTTGACTCTTCGGAGTCTCCAGCCCCACCCATGCCTTTTACAGGAGCTT  
CACCTGCCACAGAATGAAGATGGTCCCTTTGAGCACAGTCTGGCAGGGGCACAAGTGGCT  
GATGGAATATTTACAATGTCTCCCTTGCTTCCCTTTGTTTTGCAATAGAAAGTGTTCCTT  
TGATGGACATTTAATTCAGAGACTGCTACCTGCTACCTATCTCCCTTTGCTCAAAAATT  
AAATGTGGATGTGCCTGTTCTCCTGCTATAATCATCTTCCTCTGTGTGAAGGGAGTGCAG

284382 CAGCACACGAGGGTGCCCGTTAGGCAGGATTGGTGTGTTAGGCGAGGGAGGCTGAAGGAG  
TTGGTGAAGAAACACCTTGCACTGAGAGAGTAGGACGGGGCAGCAAGAGAGAGCCCACTT  
TCCCGCCCCACCACCATGCAGGTGCCTCACCCCTGGGATCCAAGGCTTGGGCCTTGACCA  
CATGGCCTGTCTCCCTCTCAGAATCTGAGCTCCCGACAGCCTGTGTAGCACTTCCACAT  
TGCCCACTTACACAACGCCTCCCTCCCTTGACTCTTCGGAGTCTCCAGCCCCACCCA  
[T, C]  
GCCTTTTACAGGAGCTTCACCTGCCACAGAATGAAGATGGTCCCTTTGAGCACAGTCTGG  
CAGGGGCACAAGTGGCTGATGGAATATTTACAATGTCTCCCTTGCTTCCCTTTGTTTTGC  
AATAGAAAGTGTTCCTTTGATGGACATTTAATTCAGAGACTGCTACCTGCTACCTATCT  
CCCTTTGCTCAAAAATTAAATGTGGATGTGCCTGTTCTCCTGCTATAATCATCTTCCTCT  
GTGTGAAGGGAGTGCAGTGGGAATGAGAGAACATTAGAATCTTCAAAGAGGGACAATTAT

287120 CCCCATCCCAGGCTGAGTTAGAGAGGCCCTGGCAATGGGATCCGGGCCCCAGCTCAGGGC  
TCCTTATGGCATTCTCTCGAACCATTCTCTCGAACTCTGACCTCAGGTAATCCACCTGC  
CTCGGCTCCCAAAGTGCTAGGATTATAGGCGTGAGCCACCGCGCCCGGCTGCCACTAT  
CATTCACAACATCATCTTGACCATCACCCACAGGGGCACCAGGGAGGAGTGGGGTGGTCC  
CCAAGCCTCTGCCACACACCCACAGGACCTTCCCTCCGAAGGAGTAAAGTATCCTGTGGA  
[C, T]  
CAAGGCTAAGGCTAAGACTGGACCCTGCCCTGTCCGGAGAGATCTGATTCCCTCCCTAC  
CTGGGAGCCAGGCCAACACACACAGTGTGAGGGCAGGAGAGTGATGAAGGTAAGGGGT  
GCCAGCTTACATCAGGTGATGTTTAAAGCAGAGGCCAAGATGAATACACCAGGTGGAGATT  
TGGGTGAATAGCACTCCAGCCAGGGGGATAGTCAATGCCAGGCCCCCTGGGCAGGAGCATG  
CCCAGTGATCAGTGCTGCTGAAGTCCCTTGGTCCCCCATACCCCCACCTCTCTTGTA

287415 GTGGACCAAGGCTAAGGCTAAGACTGGACCCTGCCCTGTCCGGAGAGATCTGATTCCCT  
CCCTACCTGGGAGCCAGGCCAACACACACAGTGTGAGGGCAGGAGAGTGATGAAGGTA  
AGGGGTGCCAGCTTACATCAGGTGATGTTTAAAGCAGAGGCCAAGATGAATACACCAGGTG  
GAGATTTGGGTGAATAGCACTCCAGCCAGGGGGATAGTCAATGCCAGGCCCCCTGGGCAGG  
AGCATGCCAGTGATCAGTGCTGCTGAAGTCCCTTGGTCCCCCATACCCCCACCTCT  
[C, T]  
TTGTAGTCACTGTGTGGAATTGCTGGGCAGGTGGGCAGGGCTGACTGGGGTGAAGATAA  
GAAAGACATGAACCTTGGGTGTTGACACTTTCTTGCCCAAAATGATTGGAATTTTTTTTT  
TTTTTTTTTTTTTTTTGAGACGGAGTCTCGCTCTGTCAACCAGGCTGGAGTGCAGTGGCG  
TGATCTCGGCTCACTGCAAGCTGTGCCTCCCGGGTTCATACCATTCTCTGCCTCAGCCT  
CCCGAGTAGCTGGGACCACAGGCGCCACCACCATGCCTGGCTGATTTTTTGTATTTTTG



287683 GTCCCCCTGGTCCCCCATACCCCCACCTCTCTTGTAGTCACCTGTGTGGAATTGCTGG  
GCAGGTGGGCAGGGCTGACTGGGGTGAAGATAAGAAAGACATGAACCTTGGGTGTTGACA  
CTTTCTTGCCCAAAATGATTGGAATTTTTTTTTTTTTTTTTTTTTTTTGGAGACGGAGTC  
TCGCTCTGTCACCAGGCTGGAGTGCAGTGGCGTGATCTCGGCTCACTGCAAGCTGTGCC  
TCCCGGGTTCATACCATTCTCCTGCCTCAGCCTCCCGAGTAGCTGGGACCACAGGCGCCC  
[A, G].  
CCACCATGCCTGGCTGATTTTTTGTATTTTTTGGTAGAGAAGGGGTTTACCCTGTTAGCC  
AGGATGGTCTCAATCTCCTGACCTCGTGATCCGCCCGCCTCGGCCTCCCAAAGTGCTGGG  
ATTACAGGCGTGAGCCACCACGCCCGGCCAATGATTGGAATTTGAGAAGAATAGGAGGAA  
GATCAGAAAACAGGTCTCGGAGCCCGCACAGCAGACGAGGGCTGGACTACGTGAAAGAGC  
TCATTTCAATAATGGGCTCAGTGTCACTCATGGAGAGGGCCAGCTTCACATCTGGCCAG

287699 CATACCCCCACCTCTCTTGTAGTCACCTGTGTGGAATTGCTGGGCAGGTGGGCAGGGCT  
GACTGGGGTGAAGATAAGAAAGACATGAACCTTGGGTGTTGACACTTTCTTGCCCAAAAT  
GATTGGAATTTTTTTTTTTTTTTTTTTTTTTTTTTTGGAGACGGAGTCTCGCTCTGTCACCAG  
GCTGGAGTGCAGTGGCGTGATCTCGGCTCACTGCAAGCTGTGCCCTCCCGGGTTCATACCA  
TTCTCCTGCCTCAGCCTCCCGAGTAGCTGGGACCACAGGCGCCACCACCATGCCTGGCT  
[G, A]  
ATTTTTTGTATTTTTTGGTAGAGAAGGGGTTTACCCTGTTAGCCAGGATGGTCTCAATCT  
CCTGACCTCGTGATCCGCCCGCCTCGGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGCC  
ACCACGCCCGGCCAATGATTGGAATTTGAGAAGAATAGGAGGAAGATCAGAAAACAGGTC  
TCGGAGCCCGCACAGCAGACGAGGGCTGGACTACGTGAAAGAGCTCATTTCAATAATGGG  
CTCAGTGTCACTCATGGAGAGGGCCAGCTTCACATCTGGCCAGCAGTGTGTTGACAGCA

287723 CACCTGTGTGGAATTGCTGGGCAGGTGGGCAGGGCTGACTGGGGTGAAGATAAGAAAGAC  
ATGAACCTTGGGTGTTGACACTTTCTTGCCCAAAATGATTGGAATTTTTTTTTTTTTTTT  
TTTTTTTTTTGAGACGGAGTCTCGCTCTGTCACCAGGCTGGAGTGCAGTGGCGTGATCTC  
GGCTCACTGCAAGCTGTGCCCTCCCGGGTTCATACCATTCTCCTGCCTCAGCCTCCCGAGT  
AGCTGGGACCACAGGCGCCACCACCATGCCTGGCTGATTTTTTGTATTTTGGTAGAGA  
[A, C]  
GGGGTTTACCCTGTTAGCCAGGATGGTCTCAATCTCCTGACCTCGTGATCCGCCCGCCT  
CGGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGCCACCACGCGCCGATGATTGGAA  
TTTGAGAAGAATAGGAGGAAGATCAGAAAACAGGTCTCGGAGCCCGCACAGCAGACGAGG  
GCTGGACTACGTGAAAGAGCTCATTTCAATAATGGGCTCAGTGTCACTCATGGAGAGGGC  
CCAGCTTCACATCTGGCCAGCAGTGTGTTGACAGCAGCTGCATCTGGGAGGTGGATTTTCG

287833 TTTTTTTTTTTTTTTTTTTTGGAGACGGAGTCTCGCTCTGTCACCAGGCTGGAGTGCAGTG  
GCGTGATCTCGGCTCACTGCAAGCTGTGCCCTCCCGGGTTCATACCATTCTCCTGCCTCAG  
CCTCCCGAGTAGCTGGGACCACAGGCGCCACCACCATGCCTGGCTGATTTTTTGTATTT  
TTGGTAGAGAAGGGGTTTACCCTGTTAGCCAGGATGGTCTCAATCTCCTGACCTCGTGA  
TCCGCCCGCCTCGGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGCCACCACGCGCGGCC  
[G, A]  
ATGATTGGAATTTGAGAAGAATAGGAGGAAGATCAGAAAACAGGTCTCGGAGCCCGCACA  
GCAGACGAGGGCTGGACTACGTGAAAGAGCTCATTTCAATAATGGGCTCAGTGTCACTCA  
TGGAGAGGGCGCCAGCTTACATCTGGCCAGCAGTGTGTTGACAGCAGCTGCATCTGGGAG  
GTGGATTTCCGGATGATTTATTTTCTTTTCTTTATATTTATTTGCACTTTCCAAGTGGT  
TCTCTGATGGGCATGTATTTCTTCTAGAAATAGACAAATGTTTGAAGCTGGAAGAGGGGA

288000 ATTTTTTGTATTTTTTGGTAGAGAAGGGGTTTACCCTGTTAGCCAGGATGGTCTCAATCT  
CCTGACCTCGTGATCCGCCCGCCTCGGCCTCCCAAAGTGCTGGGATTACAGGCGTGAGCC  
ACCACGCCCGGCCAATGATTGGAATTTGAGAAGAATAGGAGGAAGATCAGAAAACAGGTC  
TCGGAGCGCCGACAGCAGCAGAGGGCTGGACTACGTGAAAGAGCTCATTTCAATAATGGG  
CTCAGTGTCACTCATGGAGAGGGCCAGCTTCACATCTGGCCAGCAGTGTGTTGACAGCA  
[G, C]  
CTGCACTCTGGGAGGTGGATTTCCGGATGATTTATTTTCTTTTCTTTATATTTATTTGCA  
CTTTCCAAGTGGTCTCTGATGGGCATGATTTCTTCTAGAAATAGACAAATGTTTGAAG  
CTGGAAGAGGGGAGGGAGCCTTTAGCTGAAGACATGTCCGGTGGTGTCCAAAATGCCAG  
TGCTTACACAGCTAAGTCACTCCTATCTGACCCACAGTGAAACCAGCAGGGGGCAGGA  
ATGTAAAAATAAACTGGAATTTGGTAACCTATGACTTTGACACACCTTGCTAGGAAAAT

288050 GTCTCAATCTCCTGACCTCGTGATCCGCCCGCCTCGGCCTCCCAAAGTGCTGGGATTACA  
GGCGTGAGCCACCACGCCCGGCCAATGATTGGAATTTGAGAAGAATAGGAGGAAGATCAG  
AAAACAGGTCTCGGAGCCCGCACAGCAGACGAGGGCTGGACTACGTGAAAGAGCTCATTT

CAATAATGGGCTCAGTGTCACTCATGGAGAGGGCCCAGCTTCACATCTGGCCAGCAGTGT  
 GTTGACAGCAGCTGCATCTGGGAGGTGGATTTCGGGATGATTTATTTCTTTTTCTTTAT  
 [A, T]  
 TTTATTTGCACTTTCCAAGTGGTTCTCTGATGGGCATGTATTTCTTCTAGAATTAGACAA  
 ATGTTTGAAGCTGGAAGAGGGGAGGGAGCCTTTAGCTGAAGACATGTCCGGTGGTGTCCA  
 AAATGCCCAGTGTCTCACACAGCTAAGTCACTCCTATCTGACCCACAGTGAAACCAGCA  
 GGGGGCAGGAATGAAAAATAAACTGGAATTTGGTAACCTATGACTTTGACACACCTTG  
 CTAGGAAAATATCTATCCTGGAAGCCAAGGCCAGCTGTGAGGGAGGAAATCTATCCAGGG

288331 TTATTTTCTTTTTCTTTATATTTATTTGCACTTTCCAAGTGGTTCTCTGATGGGCATGTA  
 TTTCTTCTAGAATTAGACAAATGTTTGAAGCTGGAAGAGGGGAGGGAGCCTTTAGCTGAA  
 GACATGTCCGGTGGTGTCCAAAATGCCAGTGTCTCACACAGCTAAGTCACTCCTATCTG  
 ACCCCACAGTGAAACCAGCAGGGGGCAGGAATGAAAAATAAACTGGAATTTGGTAACC  
 TATGACTTTGACACACCTTGCTAGGAAAATATCTATCCTGGAAGCCAAGGCCAGCTGTGA  
 [G, A]  
 GGAGGAAATCTATCCAGGGAGACTGAGCTGGAGGCTGCAGCTTTGGGGCATCTGCCTCTG  
 GGGGCTGGAAGAAGGCAAGGAAGGAAGTTTTCCCTCCCCACTCCACCTCAAGCCCTGTG  
 GAATTCGGATGACAAAGGCAGGGAGTGAAGGCAGGGAGCCACCAAGAGGGCAGCCCTTGG  
 AGATGAAGGCTCAAAAGCCTTCCCAAAAAGCGAGTTTGGACTTTGGGATCTCGAGTGATC  
 ATCTGCACAGAAGCAGAGCTCTGAGCATCAGGCTGCCTTTCCCTCAGGGTCCACGGCCCT

288438 GCCTTTAGCTGAAGACATGTCCGGTGGTGTCCAAAATGCCAGTGTCTCACACAGCTAAG  
 TCACTCCTATCTGACCCACAGTGAAACCAGCAGGGGGCAGGAATGAAAAATAAACTG  
 GAATTTGGTAACCTATGACTTTGACACACCTTGCTAGGAAAATATCTATCCTGGAAGCCA  
 AGGCCAGCTGTGAGGGAGGAAATCTATCCAGGGAGACTGAGCTGGAGGCTGCAGCTTTGG  
 GGCATCTGCCTCTGGGGCTGGAAGAAGGCAAGGAAGGAAGTTTTCCCTCCCCACTCCA  
 [C, -]  
 CTCAAGCCCTGTGGAATTCGGATGACAAAGGCAGGGAGTGAAGGCAGGGAGCCACCAAGA  
 GGGCAGCCCTTGGAGATGAAGGCTCAAAAGCCTTCCCAAAAAGCGAGTTTGGACTTTGGG  
 ATCTCGAGTGATCATCTGCACAGAAGCAGAGCTCTGAGCATCAGGCTGCCTTTCTCCAG  
 GGTCCACGGCCCTTCCCAAGTGTCTCGGGCACCAGAGGAGCTCAGTAATTTGGGACAAA  
 TGACTTCATGATTTAAGTTTGGGCAAAGTTCTCTTGCACCTCATTAAAGCACAGTTGC

288625 CTGTGAGGGAGGAAATCTATCCAGGGAGACTGAGCTGGAGGCTGCAGCTTTGGGGCATCT  
 GCCTCTGGGGCTGGAAGAAGGCAAGGAAGGAAGTTTTCCCTCCCCACTCCACCTCAAG  
 CCCTGTGGAATTCGGATGACAAAGGCAGGGAGTGAAGGCAGGGAGCCACCAAGAGGGCAG  
 CCCTTGGAGATGAAGGCTCAAAAGCCTTCCCAAAAAGCGAGTTTGGACTTTGGGATCTCG  
 AGTGATCATCTGCACAGAAGCAGAGCTCTGAGCATCAGGCTGCCTTTCTCCAGGGTCCA  
 [C, T]  
 GGCCCTTCCCCAGTGTCTGCGGGCACCAGAGGAGCTCAGTAATTTGGGACAAATGACTTC  
 ATGATTTAAGTTTGGGCAAAGTTCTCTTGCACCTCATTAAAGCACAGTTGCTCCTGGG  
 GTAAAGAAGGATTTAAGATTCTGTTCCCTGGAATCCCTTGGTTTATCTCAGGACCCAGTG  
 GCAAGCTTGGCCCGGGCATGGAGTGCCCTCAGTAAAGGGAAGAAATGACGAAGGAAGTTT  
 TGAACAGCATGATGTACGGTGCCACACACTTCCCAAGGCCTTGGAGGCTCTGCCTGGGT

288819 GGCTCAAAAGCCTTCCCAAAAAGCGAGTTTGGACTTTGGGATCTCGAGTGATCATCTGCA  
 CAGAAGCAGAGCTCTGAGCATCAGGCTGCCTTTCTCCAGGGTCCACGGCCCTTCCCCAG  
 TGCTGTGCGGGCACCAGAGGAGCTCAGTAATTTGGGACAAATGACTTCATGATTTAAGTTT  
 GGGCAAAGTTTCTCTTGCACCTCATTAAAGCACAGTTGCTCCTGGGGTAAAGAAGGATT  
 TAAGATTCTGTTCCCTGGAATCCCTTGGTTTATCTCAGGACCCAGTGGAAGCTTGGCCC  
 [A, G]  
 GGCATGGAGTGCCCTCAGTAAAGGGAAGAAATGACGAAGGAAGTTTTGAACAGCATGATG  
 TACGGTGCCACACACTTCCCAAGGCCTTGGAGGCTCTGCCTGGGTGTCCCACTGCCCT  
 CTCCTGCCTGTCTTGTTCCTTCACTCTCCACCTGACTCAGCCCTCTAGCCAGCCACACCAG  
 CTTTCACCAAGTCTCCAGACGTGCCCCACCATGGCTCCTGCACGCGCAGTCTGCTCCTGG  
 CCTGCTCTTCCCTCTGCTTCCCTCCCAACTCCTCCTACAGGTCTCATCTGAACT

291274 TGGCCTTGAATTAAGGAGAAGAGCCCCAGGCTCCAGCAACCCATTGGCCTTCAACCTGG  
 AATGGTCAGTGAGGAGCCCATGCGTATTCTCCAGGATTCAGCAAAGCCAGGCGCTGGAAG  
 TACTCATCCCCAGGGAGTCGGGAAGTGGGGCTGGAGGGGCTGCCCTCTCCGCTGACACT  
 CCTGCAATCCCAGTGATGGGCGTTGCCCTGCGTGATGTCCATCCTAGAAGCCCGTCACC  
 AGCAAGATAAAGTGTGCCATGCTGCAATGCATCCAGGCTTTACTTCCCAAACTGCA  
 [T, C]

GGTTCTGATGCTGTTTCAGCAAGCGCGCTGGGATAAAACGAGCTGTGTGCTTCGGTTTTTA  
ACGTTGTAAAGCTTCTTTTTGTTTCTTGGTCATAGACTTGTGTATATGTTTGTGTTGAAG  
TAATCCAGCTCTGGGAGGGTGCCATAATTAACATAAGCAGGGCTTATTAGTCCGTGTTAACT  
AAAACCTCCCTAATCTAGGAGGCCAAGTATTCAAAGCAGCCTTTAAGGTAGGATTAAGGC  
AAAAACCAGTGATTACAAAATGGAATTGGGGTAGCTTTCTTAAAGCCTCTGTGGGGCTG

292997 CATAGAAAGCAAGGAAAGAGTGACCTCACTCACTGGGGCCACAGCCACTGCCAGTTGCAG  
GGAGGAGCCTGTAGGGTCTGTAGGTAGAAAAGCTGGGGTGGGCTGGAGGGGCCTGCATT  
CCTACTTCTGCTTACTGGTTTGTCTAAGGGTCTGTAGCCCTAGAGCTGCACCAGGCAG  
GTACAAGATCTGCAAGGAGAGTGAGATCAGCCTCCCTGAGTTGGGTGGTGGGGGGCGGTG  
GGCAGCCTTTTTCTTGTGACCACAGACTGTCCACCCAGTGGATGGATAATAAAGACAGGT  
[C, T]  
CCCACCTTTGATGCCAATTTAAAGATATCTTAAACATGGCACAGGGACCTTCTCAAGGCT  
GTGGCCCGTCATTGGGAAGAAGTGGGGTGGGGAGTGCCCTAACATTCAATTGAGCCATGT  
GCTTGACATTGAGCTAGGCCCTTGACCTATGATTAATAAACACAGAAGAGTTCGTTGTTA  
TGTAGGATAGTGGCAAAGAATGCAGACTTTAGAGTCAAACGCTTAAGGTCAAGTGCTGC  
GTCCAGCATGTATGAGCTAGTGGACCTTGGGAGACAATGTCGTTTCGCTGTGCCTCTGTG

296708 GGAAAGTGGGTGCTGTTTGA AAAACAGAGGAGTACTCTGAGTGCCCTCCAAAGAGTGCC  
TCATGCATATGCAAGTGGATGGGATGCCCTCAGGACCTGTATCTTTTACTTGAGGTGATC  
TTCCAAGAGATTACATTAACCAGAGGTGGTGCTGGGACAGGACTTACAAGAAATGCAAGA  
TACAAGAGCCATTTCGTAGCTCCAGGCAGGGGTGAGCAGAGAGGAGAGGAAAGGGCAGTGC  
TGGGCCCACGCTGGAGACTAGAGGGGACATCCTTGGCCCAAAAGAGATGAAGCCCCCTTAC  
[A, G]  
TTAGAAGATGTTCAAGCTCTGCTTAAAGTGGGCAATGCATATACCCTTGGGTGTGACCTG  
CCAGCTCACAGTTCCTAAGTGCAAGCCCTGGCATTCAAGAGGTGGGTGCAAGCCCACCCC  
ACCCCCAGGGGCACTGAGTACCCTGAGCCACAGAGCCTGGTATCCTCCCTCAACCCCAGC  
CTTTACCTGGACTCCCGTTTTCCAGCAAAGTATTCTGCTTCAGAGTGACATCTCTTTGG  
GCTGTTGCTATTCCACACCTTCACAAGGCCTGAAGAGGGATCCTTGTGATTGTTGGCAA

296744 CTGAGTGCCCTCCAAAGAGTGCCCTCATGCATATGCAAGTGGATGGGATGCCCTCAGGAC  
CTGTATCTTTTACTTGAGGTGATCTTCCAAGAGATTACATTAACCAGAGGTGGTGCTGGG  
ACAGGACTTACAAGAAATGCAAGATACAAGAGCCATTTCGTAGCTCCAGGCAGGGGTGAGC  
AGAGAGGAGAGGAAAGGGCAGTGCTGGGCCCACGCTGGAGACTAGAGGGGACATCCTTGG  
CCCAAAGAGATGAAGCCCCTTACATTAGAAGATGTTCAAGCTCTGCTTAAAGTGGGCAA  
[T, C]  
GCATATACCCTTGGGTGTGACCTGCCAGCTCACAGTTCCTAAGTGCAAGCCCTGGCATT  
AAGAGGTGGGTGCAAGCCCACCCCACCCAGGGGCACTGAGTACCCTGAGCCACAGAGC  
CTGGTATCCTCCCTCAACCCAGCCTTTACCTGGACTCCCGTTTTCCAGCAAAGTATTCC  
TGCTTCAGAGTGACATCTCTTTGGGCTGTTGCTATTCCACACCTTCACAAGGCCTGAAGA  
GGGATCCTTGTGATTTGTTGGCAAGAAGGGCTCTTGTGGCAAATAGAGAGGTACTTGGAT

297548 TGTGTTTCATAATAAGGTGAGAGTGACTGGTAGGCTTATCCTGCTGCGGAGGTGTTTGT  
CTTGTGGGCCAAAGAGATTATTTCCAGAAATGCATTGGAATGTGTGGAAGTATCCACAA  
CTCCCCACACCTGGTTTCATGAGAGCTCATTGTTAAATTTTCAGGAATTTTACAAGCAAAC  
AGTTAGACATTTGGTCGCTTTAAATTGGCCACGTTGAGAATATTTACATCATAGAAATTC  
ACACCACACATATGCTACCAAAAAGGGGAAGGGGGACATTTTTCTTCTCTAGGGAGCC  
[A, G]  
GTTGTTATACATTGACCTGCATGTCACTGGACAAGACCCTCTCTCCTGCCCTCGGAGTCC  
ACTTCTGGCAATATCTTCCCCACCCACCTCCCTCACTGAGACTCCTTGATGATTCCATG  
GAACATGAACAACAGTAGGCTCGAGCAGCTAGGGCAGGTTACAGGAACAGCAGCTCTCTG  
AGTCAGGAAAGCAGCAACATGTTCTCTGGGGATAGTTCCAAGACATTCCTCAAAAACACTC  
TCTGAGCCTAGACCCCTCTGCCAAAGGAGTTATGAAGGAAAAGCTCAGTGCATTTTTAGA

298436 CCTGGAAAGGGAAGGACGTCATTACCTGACCTCCAGCCACATGTCTCATACAGAGCAATG  
TGGTGTGAGCTCCCTTCGTTCTGGATTATTATTTGGAAAGCTTTATAATCATCATTTTT  
AAAGCAAATTAGATTCTGCTGTGCGCTTGGACTTGTGTTGAACCAGACAGCCAAACCATT  
CATCAGCCAGCCCAATAATAGATATGCAATAAAACGTAAACTCACAGCCATTAAAG  
AAGCCGCAAAATGAGTTAACCCCACTATAAAGGCTTGACATGCAGCCACTTGGAGCATA  
[C, T]  
GGGGATCAATGGTTTTTCAAAGTCACAGGAACCTCTAAACTAAATTCCCATAGCTCTGGTA  
ATAGATTTATGGTTTCAGCGAATTTTAAATAGGTAATTGAAATGAGACATATAGGTACAAG  
TTATTACCCAGCAATCGATGGGCATTAAAGAAATCTCACTAAAACCCAGAAAGTAATATC

TCAAACATTTTCAGCAACAACATTCTGGATTTAATTTTAAAACTAGAGCTGATGGGCTGG  
CAGAGGTTGAGGCATTAGCATTTTATTTTCTAGTCTCTATTTTGCTGGCGTCTTGGGTA

300652 CCCACACAGGATTTGCAAATAAAGTGGCCGAAGAACTGATTCAGTGCCTTGGTCCCTCA  
TTTTCTCAAGGGCACAACAGTTAAAGCTGGAGTGGCCAAGGGAGGAATTGAAAATTGG  
CAGACAAGGCCGGGCACGGTGGCTCAGCCTGTAATCCCAGCACTTTGGGAGGCCGAGGC  
AGGCAGATCATGAGGTCAGGAGATCCAGACCATCTGGCTAACATGGTGAAACCCCGTCT  
CTACTAAAAATACAAAACTTAGCCGGGCTTGGTGGTGGGCGCTGTAGTCTCAGCTACT  
[T, C]  
GGGAGGCTGAGGCAGGAGAATGGCGTGAACCCAGGAGGCAGAGTTTGCACTGAGTGGAGA  
TCGCACCACTGCACTCCAGCCTGGGCAACAGAGCGAGACTCCATCTCAAAAAAAAAAAAA  
AAAGAAATTGGGAGACAGAAGGTGTGAGTCTCACCACCTCCTCCAGAGACAGAGTTGG  
GGGTGCTGTCTGACTTCAAGTACATAGAGAGGGCTTCAAGGAGCCCACTTCCACGTGAG  
TCTCCTGAGGCCAGCGCTGGAGGACAGGGTTCACAGTCAGTGTTCATTGAAATGACTTT

300653 CCACACAGGATTTGCAAATAAAGTGGCCGAAGAACTGATTCAGTGCCTTGGTCCCTCAT  
TTTCTCAAGGGCACAACAGTTAAAGCTGGAGTGGCCAAGGGAGGAATTGAAAATTGGC  
AGACAAGGCCGGGCACGGTGGCTCAGCCTGTAATCCCAGCACTTTGGGAGGCCGAGGCA  
GGCAGATCATGAGGTCAGGAGATCCAGACCATCTGGCTAACATGGTGAAACCCCGTCTC  
TACTAAAAATACAAAACTTAGCCGGGCTTGGTGGTGGGCGCTGTAGTCTCAGCTACTT  
[G, A]  
GGAGGCTGAGGCAGGAGAATGGCGTGAACCCAGGAGGCAGAGTTTGCACTGAGTGGAGAT  
CGCACCACTGCACTCCAGCCTGGGCAACAGAGCGAGACTCCATCTCAAAAAAAAAAAAA  
AAGAAAATTGGGAGACAGAAGGTGTGAGTCTCACCACCTCCTCCAGAGACAGAGTTGGG  
GGTGCTGTCTGACTTCAAGTACATAGAGAGGGCTTCAAGGAGCCCACTTCCACGTGAGT  
CTCCTGAGGCCAGCGCTGGAGGACAGGGTTCACAGTCAGTGTTCATTGAAATGACTTTG

300747 GGCCAAGGGAGGAATTGAAAATTGGCAGACAAGGCCGGGCACGGTGGCTCAGCCTGTAA  
TCCCAGCACTTTGGGAGGCCGAGGCAGGCAGATCATGAGGTCAGGAGATCCAGACCATCC  
TGGCTAACATGGTGAAACCCCGTCTCTACTAAAAATACAAAACTTAGCCGGGCTTGGTG  
GTGGGCGCTGTAGTCTCAGCTACTTGGGAGGCTGAGGCAGGAGAATGGCGTGAACCCAG  
GAGGCAGAGTTTGCACTGAGTGGAGATCGCACCACTGCACTCCAGCCTGGGCAACAGAGC  
[G, A]  
AGACTCCATCTCAAAAAAAAAAAAAAGAAAATTGGGAGACAGAAGGTGTGAGTCTCAC  
CACCTCCTCCAGAGACAGAGTTGGGGGTGCTGTCTGACTTCAAGTACATAGAGAGGGC  
TTCAAGGAGCCCACTTCCACGTGAGTCTCCTGAGGCCAGCGCTGGAGGACAGGGTTTACA  
GTCAGTGTTCATTGAAATGACTTTGCTTGTCAATATCGCCGTAGTTAGTAATAGGCTCT  
TAGTACTCCAGTTGTATAAAGTGATACCCAGCATTTAACTTGTGTGTCAGCACTGTACACTA

300776 CAAGGCCGGGCACGGTGGCTCAGCCTGTAATCCCAGCACTTTGGGAGGCCGAGGCAGGC  
AGATCATGAGGTCAGGAGATCCAGACCATCTGGCTAACATGGTGAAACCCCGTCTCTAC  
TAAAAATACAAAACTTAGCCGGGCTTGGTGGTGGGCGCTGTAGTCTCAGCTACTTGGG  
AGGCTGAGGCAGGAGAATGGCGTGAACCCAGGAGGCAGAGTTTGCACTGAGTGGAGATCG  
CACCCTGCACTCCAGCCTGGGCAACAGAGCGAGACTCCATCTCAAAAAAAAAAAAA  
[A, -, G]  
AAAATTGGGAGACAGAAGGTGTGAGTCTCACCACCTCCTCCAGAGACAGAGTTGGGGGT  
GCTGTCTGACTTCAAGTACATAGAGAGGGCTTCAAGGAGCCCACTTCCACGTGAGTCTC  
CTGAGGCCAGCGCTGGAGGACAGGGTTCACAGTCAGTGTCCATTGAAATGACTTTGCTT  
GTCAATATCGCCGTAGTTAGTAATAGGCTCTTAGTACTCCAGTTGTATAAAGTGATACCC  
AGCATTTAACTTGTGTGTCAGCACTGTACACTATGTCCAGTTTCACAGATGAAGAACTGAA

300874 CATGGTGAAACCCCGTCTCTACTAAAAATACAAAACTTAGCCGGGCTTGGTGGTGGGCG  
CCTGTAGTCTCAGCTACTTGGGAGGCTGAGGCAGGAGAATGGCGTGAACCCAGGAGGCAG  
AGTTTGCACTGAGTGGAGATCGCACCACTGCACTCCAGCCTGGGCAACAGAGCGAGACTC  
CATCTCAAAAAAAAAAAAAAGAAAATTGGGAGACAGAAGGTGTGAGTCTCACCACCTC  
CTCCAGAGACAGAGTTGGGGGTGCTGTCTGACTTCAAGTACATAGAGAGGGCTTCAAG  
[G, A]  
AGCCCACTTCCACGTGAGTCTCCTGAGGCCAGCGCTGGAGGACAGGGTTCACAGTCAGTG  
TTCCATTGAAATGACTTTGCTTGTCAATATCGCCGTAGTTAGTAATAGGCTCTTAGTACT  
CCAGTTGTATAAAGTGATACCCAGCATTTAACTTGTGTGTCAGCACTGTACACTATGTCCAG  
TTTCACAGATGAAGAACTGAACTCAGAGAAGTAGCTAACCCAAGATCACATAGTCAGC  
AGGTAGCAGAGTCAGGATTTAGTGGCGTGTCTGATTCTAGAATTTCTCATGCATTTAA

301027 TCCAGCCTGGGCAACAGAGCGAGACTCCATCTCAAAAAAAAAAAAAAAAAAGAAAATTGGGA  
GACAGAAGGTGTGAGTCTCACCACCTCCTCCCAGAGACAGAGTTGGGGGTGCTGTCCTGA  
CTTCAAGTACATAGAGAGGGCTTCAAGGAGCCCACTTCCACGTGAGTCTCCTGAGGCCAG  
CGCTGGAGGACAGGGTTCACAGTCAGTGTTCATTGAATGACTTGTCTGTCAATATCG  
CCGTAGTTAGTAATAGGCTCTTAGTACTCCAGTTGTATAAAGTGATACCCAGCATTTAAC  
[T, A]  
TGTGTCAGCACTGTACACTATGTCCAGTTTTCACAGATGAAGAACTGAAACTCAGAGAAG  
TAGCTAACCCAAGATCACATAGTCAGCAGGTAGCAGAGTCAGGATTTAGTGGGCGTGTCT  
GATTCTAGAACTTTCTCATGCATTTAAACAACTTTGCAACACATCTGCATTCTCCGTTG  
AAGAGAATCTCACTGTCTCAGTGATTTCCCTAAACTTCAAGCCCCAACTCAATGGTC  
TTCTCCTCCAGGAGGTCTTCTCAATTTCTCTTCTCCTCCACCAAGCCCCACACACCTTCC

301640 CAGCCCTGGGTAAACAAGGCTGTGGCCTGATTATTAAGAGTGTGGACTCCAGAGTCCAAG  
CTAGACCTGGTTTTGAATCTTTATTCTGCGACTGACTAACTGTGTGACTTTGGACAGTTC  
CCTACCAGAGGTTAAACTGGGCTTTAATTTTCCCATCTGTAAATGGGAATAACAACCGT  
GCACAGAGTTATTGAGGACTAAAGGAGCTACTTAATGTAAAGTGATTAGTAGCATGAGAC  
TTTGCCTATAGTAAATATTAGGCAACATTAACCAGGTCAATGATGGCGGCGGTGAGGGT  
[A, G]  
ATGATGAAGATTTCTGTGTGTGCCCCATCACCTGTGCCATGCCATTGTTGTCTTCCCC  
CTCAGGGACCACAGGCTCCCTGAGGATAGAGGCTGCTTACCCATCCTGCACTCCTGCTC  
AGCATGGGGTATGGCACCCAGGAAGGCCTTGGTCAGAGTTGCTCATTGAGGGCATGAAGG  
ACATGGAGAAATACATCGGGCAAGGAGAGGAGTCCAGACATGCAGCTGTGGCCAGCGATC  
CCAGAGGGTCTCTGCATGCCCTCCAGGGGGCCTTGAGAAAACAGGGGCAGAGGAAGTGCCT

302581 TGCTGGCCTACAGCCACATCCCTCGTGATGCAGCAGAACCTGGCTTCAGCAGCCCAAGAC  
CAGCAGCCCCACCCGGCCCACTCCTGCCACCTCACCTGGAGGTCAGCTTTGCTGGCTGT  
GCAAATCTGCATACCTTCTAAATAATTTATAGGCATAGAATATGGGTTTGTATTTCATG  
CTGGGCCCTGGCAGGCTGGCAAGGCAGGCCTCTGGAGCAAAACCGTCAGCCACAAATACC  
CAAGCTCCCCACTGCAGGTGAGGACAAATGCGGAAGGAAGACCACCGTGGGAAGGCCAGC  
[G, A]  
GGTCCGCCCTGAAGCTACCGTAGGCTGAGGCTCTCTGAAAGCAGGGTGAGCTCCTGGGCA  
GGGAGGGACAGGCCCGGTCTCATCTCCCATCTGTACACTTGGCGTGGAGTGGCATGGAAG  
AGGCAGGCCACCAACCTGAGCCTTTCAGAGGAACCTGACCAGGGCAGGGAGAGCAGCACA  
GGGAAAGGGTGAGGAATTGAGGTTGGGAAGCATAAGAGGAGGAGAACCATGAAAGATGAG  
GTGGTGTAGGTGAGCAACGCACACAGAGCTCACTCTTGGGGAAGCACTGGGCAGAGAC

304512 CCTGACATCATAAAGCTCGAAATTTTGCATGCAGGAGAGAGCTCTCTGAATGTTAGTAAA  
TACTCAAAAATGGCTGCAGAGGAAACAAGAAATTTTATTACAAAGATATAAAATGAGAAC  
AATTTAAATGTGAGCTTTTTTACCAGGATAGCACCATATTGTCTCATAAATCTCCATGTT  
TTTGCAAAGCTTTTGTGAGGACTTCAATGTGCAATTAAGCACTGAAGGTCACATTCCCGA  
TTTCTCAGCTTGCTCCCTTGATTGGAGGTGTGACGGGCTTAGGATGTGAATGCCTGAG  
[G, C]  
CTTCCAGAGCTCACATCTCAAGGGAAATCTTTGCATGGCCGAGGCTACCTCCCAGGCTCC  
AGGCAGGAGCCAGAAACCAAACTGAGGGTAACAGGGAGTGCCCCCAAGCCCACTGCCTC  
CTTGGCCTGCCAGCACTGCCCTTGTCTCAGCGTGAGTGTGGGTGGTGTGAGCTCTGAGGT  
ACCTAGTGATAACCAGGTGTACTGAGGTGTAGAGAAGACCCACCTTGGCATGCTTCTGAA  
AGGTAACCTTGCTGAGGTGTACCAGCCTAGGAAGGATGCTTAGGGCACAATCACCAG

305258 GTGGGGATGTAAGAGGAACCTCACTCACACGGGACATAGTGACTGACTGGGTGAAGAGCT  
GTGGGCCCACTCAGGGCCAGGGCACTCAGAAGCCTTGGCACCAAGTGGCCCCGTGATAG  
GAGCTGGCTGGAGAGCCAGACCCTGGGGACAGACAGTCCCTGGCTAGGCAGAGAGAGGCA  
TTGGACACCTGAGCTACTTGCCTGCCTGAAGCAGCAGATGAGGAGTGAGCTGGAAACC  
CCCAGAAGATAAGCCAGTGCCCCATCTGAGATTTTCTCAGCATCAGCAATACTGATCCCT  
[G, A]  
CTTATCGTGGCCCTTCTCTGAGCAGCTCTTTAGCCCCAAAGGCTAAGGAGCACCTCTTCTA  
GCCCAGAGGCCAGCCATTCCCCACACCCTCACTCTGGGTTGAGGACCAAGGCAGGCTGAG  
AGCAGGAGAGTCCGAGGTGGTTGAAATATAGTCAGAGGCCACAGGACTAATGAGTGTAT  
GCAAAGACGGCAGCAGGGCTATACAGTAACAAACGCAGGAGGCACAAAAGGACAAAGGGA  
AAGTAGGGGTGACCTCGAAGAGCTGGCAGGGTGGTTATGGCCCAAGGCTCTTGTTCCAGC

307676 CCCCCATGATGTGTGACTCTGGGGTGGGCAGAGGGTGGGCTCAGTGAGACAGACCCTCTC  
TGGGAGCTGTTACCTGTGCTGCGGCAGATGGCAGGGCCCCCTGAAGTGGCATCCTTTCTG  
AGTCTGAAGTCCGTGTGCCACAGGTGTTTTCAGACACATTTACCTGGGTCCCTTTTCAG

ATGACAGTGTGAAAGGAGCAGGATTACTGTCTGCAGAACCATAGCAGTTGACGCCTCCA  
 ACCTCCTGACAAAGCTCAGGGCTTCCGGCTCCACAGAGAAAGCGGGGCCCCGAGCAGCAGA  
 [C, G]  
 CTGTTATTTCAGAACAGGTGTCCCGTGGAGGGCTGCTTTCTCTCAAACCCAAACCCCATCA  
 AATATCCACTCCTTCTCAGCTCCACAAATAAATGCACCTCCAGAGACTCCTCTTCTGAG  
 CCACTTCCAGCCCTGGTGTGGTCTGACCCTCAATAGTCTACCTCTGTGCCATGGTGCT  
 TGGAAATGTGCTGATGCTTGGCAGCAGGTTCAACATCAGGGAAACGATGGCTTGGAAACA  
 GAAGTCACATCCCTGCCTTTTCATGGGTGTTGAAACACCCATCCCTCGGTAAATTGCTGA

309692 GCCCCAGCCCCCTCTGTAAGCAGCCCTGGCCAGGCAGCTGAGCAGATGAAATATTCCCAGG  
 CCCCAGAGTGAGCAGTGTGACTTTAAAAAGTCTGTGTTAGACTAGACTGACTGCACCCAA  
 CCTGTTCTCTTTGAAAAACAGTGTCTCAGAAGGCTCAGGCCCTTACAAGCTCTGTAACCTC  
 AAATGTCTACCAAGATGCCCAGGCTGCAGGGAGTAGCCCTCATCCCAGGGGAGAAGTGCG  
 GTCCTTACAATGGCACAACCACAAAGGCTCTGGCCGGGGCCTCAGTCTACCAAAGGGAC  
 [T, -]  
 TGGCCTCCTGGTCTCCAGCCCCGGTTCCTGATCCTCAGATGAAGATGTTCTGATGCCATG  
 GGCATTCCAGGGAGAATGGCTGGCAAGTGGCTGTCCCTCAGTTCTCTGCAGAGGGCAG  
 TAAGCTTCCAGAGCGAAGTGTGACACACCCCGCAGGTGCCACATGAATCAGCACCATGGCT  
 GAGTTTCTCTCTCAGATGTGACAGACATGGTCTTTGAAGTCACAAAGCCAAACAGGTTA  
 GGAAGCTTTTGGGCTTCAGCTCTGAGTAGGCAGGAGTTTAAGGAAACGCCCCAAATTGAA

311656 ATTTGCAAAATGCTTTGAGATCCTGCACGTAGGATACCATTTGTGCAAAATCAGTTTTTT  
 TGGTAACACTATTTGACATGAAAAATTGTCTTTTTTCTCCTGTAGAGAGCTTTTTTTTCA  
 AAATGCCTTCCATCAAAGGGTGCAATTATGAACTCTGGAAGACTTCCTGATACCATCAAG  
 GTAGGCAGGTACTCCCTGCCATGTGACCTTAGAGGTGCCCCCTCAGAACCTACACCTGA  
 GGCTGCAGTGTGCCACCAGCCCCAGCCCCAAGGAGGCCTGCAGGTGAAAAGTGCTTA  
 [G, T]  
 CCCTGGAGGCAGTGTGCGGTCAATTCACACAAATACTTCTTGGCAGGAGCTGTTCTAGGCT  
 GCAGAAATTCACAGGTTTCAACACAGACAAAACTCTTGCCCTCACGGAAGTTGTATTG  
 CAGGGAGGAGACACAGATAAACAACAATGGATGCGTAGATTACAACGTGGGTAGTACTTT  
 TGAGAACAGCAACACAGAGGGCAGGGTAGGGCAGGGCAGGGCAGGGGTGGGCAAAATTAA  
 ATACGATAGCCCAGGGAAAGCCTCATCCAGAGGGGCTATGTGAGCCAGGTGTTGAAGGGG

311776 AAATGCCTTCCATCAAAGGGTGCAATTATGAACTCTGGAAGACTTCCTGATACCATCAAG  
 GTAGGCAGGTACTCCCTGCCATGTGACCTTAGAGGTGCCCCCTCAGAACCTACACCTGA  
 GGCTGCAGTGTGCCACCAGCCCCAGCCCCAAGGCAGGCCTGCAGGTGAAAAGTGCTTA  
 GCCCTGGAGGCAGTGTGCGGTCAATTCACACAAATACTTCTTGGCAGGAGCTGTTCTAGGC  
 TGCAGAAATTCAACAGGTTTCAACACAGACAAAACTCTTGCCCTCACGGAAGTTGTATT  
 [G, A]  
 CAGGGAGGAGACACAGATAAACAACAATGGATGCGTAGATTACAACGTGGGTAGTACTTT  
 TGAGAACAGCAACACAGAGGGCAGGGTAGGGCAGGGCAGGGCAGGGGTGGGCAAAATTAA  
 ATACGATAGCCCAGGGAAAGCCTCATCCAGAGGGGCTATGTGAGCCAGGTGTTGAAGGGG  
 TGAGGGCACTCGCCACGCAGTCACTGGGGGAAGATGTGTCCTAGCCCCCTAGGTAAAAAT  
 AGGTCTGATGGTAGGAGTGGTATGGGAAGCTGGGGGCAGGGTCAAAGGTCTGGGGGGCC

311901 CAGTGTGCCACCAGCCCCAGCCCCAAGGCAGGCCTGCAGGTGAAAAGTGCTTAGCCCT  
 GGAGGCAGTGTGCGGTCAATTCACACAAATACTTCTTGGCAGGAGCTGTTCTAGGCTGCAG  
 AAATTCAACAGGTTTCAACACAGACAAAACTCTTGCCCTCACGGAAGTTGTATTGCAGG  
 GAGGAGACACAGATAAACAACAATGGATGCGTAGATTACAACGTGGGTAGTACTTTTGA  
 AACAGCAACACAGAGGGCAGGGTAGGGCAGGGCAGGGCAGGGGTGGGCAAAATTAAATAC  
 [G, A]  
 ATAGCCCAGGGAAAGCCTCATCCAGAGGGGCTATGTGAGCCAGGTGTTGAAGGGGTGAGG  
 GCACTCGCCACGCAGTCACTGGGGGAAGATGTGTCTAGCCCCCTAGGTAAAAATAGGTC  
 TGATGGTAGGAGTGGTATGGGAAGCTGGGGGCAGGGTCAAAGGTCTGGGGGGCCCTGGA  
 AGCTAACCTAAGCACTTTTGTTTTCAATGGGTGAACTAGATTATTGGAGGGCTTCAA  
 GTCGAGAAGGGATGTGATCTGACTTTATATTTTAAAGGAAGCACTTTGGCTGCTGTTTTG

312574 TGGGCACGATGGTGGTGAGGAGAGGCTGGATCATGGGTATATTCTGAAGGGCGGTGCCAA  
 AGAGATTTGCTGATGAGTTGCATGTGGTTATTAGAAAAGAAAGGAGTCCAGGATAACTCC  
 AGGGTTTTGGGCATGAGGACTGGAAGGATGGAGTTGCCATTAAGTACAGAGAGGAGACC  
 ATGGGTGGAGGAGTTTGGGAGGGAAGATCAGGAGTTAATTTGGGGGCATACTGAGTTTG  
 AGATGCTATCAGACATTCAAGTGGCAGTGTGTAACAGGCAGTTGGATAGACGAGGAGAGG  
 [G, T]

CTAGGCTGAAGATGGAACTTGGAAACCCCTTAGCATACTGACAGCATTTAAAGCTCTGAG  
TTGGATGAGATCACTGAGTAGGTGAATGTGGATAGAGAAGAGAAGCCAAGACAGAGCCCT  
AAGAGCCTCTGATGGGAAGAGGTCAGGAAGAGGAGTGGGAGCCCCAAAAGAGAATGAGAG  
GAAGATGCCAGAGTGGTGGGAGGAAACCCAGGCAAGTGCAATGTCTTAGGAGCCAAGAGA  
AGAGTGAGTCAGGAAGCGGTACAGCTGTCCCAAGTGCTGAAAGCTCAGTTAAGATGAGGAC

312593 GAGAGGCTGGATCATGGGTATATTCTGAAGGGCGGTGCCAAAGAGATTTGCTGATGAGTT  
GCATGTGGTTATTAGAAAAGAAAGGAGTCCAGGATAACTCCAGGGTTTTGGGCATGAGGA  
CTGGAAGGATGGAGTTGCCATTAAGTGAACAGAGGAGACCATGGGTGGAGGAGGTTTGG  
GAGGGAAGATCAGGAGTTAATTTGGGGGCATACTGAGTTTGAGATGCTATCAGACATTCA  
AGTGGCAGTGTTGAACAGGCAGTTGGATAGACGAGGAGAGGGCTAGGCTGAAGATGGAAA  
[C, T]  
TTGGAAACCCCTTAGCATACTGACAGCATTTAAAGCTCTGAGTTGGATGAGATCACTGAGT  
AGGTGAATGTGGATAGAGAAGAGAAGCCAAGACAGAGCCCTAAGAGCCTCTGATGGGAAG  
AGGTGAGGAAGAGGAGTGGGAGCCCCAAAAGAGAATGAGAGGAAGATGCCAGAGTGGTGG  
GAGGAAACCCAGGCAAGTGCAATGTCTTAGGAGCCAAGAGAAGAGTGAGTCAGGAAGCGG  
TCAGCTGTCCCAAGTGCTGAAAGCTCAGTTAAGATGAGGACAAAGAAAAGAGACTTGTAT

312694 AGGGTTTTGGGCATGAGGACTGGAAGGATGGAGTTGCCATTAAGTGAACAGAGGAGACC  
ATGGGTGGAGGAGGTTTGGGAGGGAAGATCAGGAGTTAATTTGGGGGCATACTGAGTTTG  
AGATGCTATCAGACATTCAAGTGGCAGTGTTGAACAGGCAGTTGGATAGACGAGGAGAGG  
GCTAGGCTGAAGATGGAACTTGGAAACCCCTTAGCATACTGACAGCATTTAAAGCTCTGA  
GTTGGATGAGATCACTGAGTAGGTGAATGTGGATAGAGAAGAGAAGCCAAGACAGAGCCC  
[T, G]  
AAGAGCCTCTGATGGGAAGAGGTCAGGAAGAGGAGTGGGAGCCCCAAAAGAGAATGAGAG  
GAAGATGCCAGAGTGGTGGGAGGAAACCCAGGCAAGTGCAATGTCTTAGGAGCCAAGAGA  
AGAGTGAGTCAGGAAGCGGTACAGCTGTCCCAAGTGCTGAAAGCTCAGTTAAGATGAGGAC  
AAAGAAAAGAGACTTGTATTAGTCATTTGGAGGTCTTCGGCTTGAAAGGCAGTTTCCACG  
CAGTGGGATGGGAGAGGGTACAAAAGTCTCATTGGATTGGGTTTAAGATGGAGTGGGAAG

313283 TGGAGTGGGAAGAAAGGAACTGGAGAACTAAATGAAGATAAATCTTCTGAGGAGTTTTG  
CAGCAAAGAACAGAAATAGGGCAGTAGCTAAAAGGATAGCAGGGCCAAGAAGGCTTTTGCA  
AACACACGTGAGCAACCGGCATGTCTGTGGATGAGCAGAGTCAAGTAGAAAGGGGAACT  
GAGGCTGTGGAAGGAAGAGGCAGTACAACCAGATGACTTCTTTGAGTAGGCGAGGGGAGG  
TGGAAATCCAGGGCCCAGGTTGGGGATTGTCTTAGATGGATGGCGGCAGACCCAGTTAAC  
[A, G]  
GGAAAGAAGCCTGAGAGTGTGAACCGACAGAGATGGGTGGGTGCGGTGTGGTGGGTGCGTG  
TGCAGACGTCTGTTTTCTCAGTGAATCAGGAAGCAAGGTCATGGCTGAGCGTGAGGATAA  
GGGAAGAGATGTGGAAGTCTGAGGAGGGAGAAGAAGGTCGGGAACGATTGTGTAGGAGAG  
TGAAAGAGGGACAGATGCAGAGGAGGCGGAGTGATCTTTGGGCAGCTTTCGGGACCCACT  
TGAGGGCCCTAGTCTGAATCCAAAGTGAGACTAGTCAGCAGGGTGGCCGTTTCCCCAGC

313403 AACACACGTGAGCAACCGGCATGTCTGTGGATGAGCAGAGTCAAGTAGAAAGGGGAACT  
GAGGCTGTGGAAGGAAGAGGCAGTACAACCAGATGACTTCTTTGAGTAGGCGAGGGGAGG  
TGGAATCCAGGGCCCAGGTTGGGGATTGTCTTAGATGGATGGCGGCAGACCCAGTTAAC  
GGGAAGAAAGCCTGAGAGTGTGAACCGACAGAGATGGGTGGGTGCGGTGTGGTGGGTGCGT  
GTGCAGACGTCTGTTTTCTCAGTGAATCAGGAAGCAAGGTCATGGCTGAGCGTGAGGATA  
[A, G]  
GGGAAGAGATGTGGAAGTCTGAGGAGGGAGAAGAAGGTCGGGAACGATTGTGTAGGAGAG  
TGAAAGAGGGACAGATGCAGAGGAGGCGGAGTGATCTTTGGGCAGCTTTCGGGACCCACT  
TGAGGGCCCTAGTCTGAATCCAAAGTGAGACTAGTCAGCAGGGTGGCCGTTTCCCCAGC  
ATGTTTCAGCTACCCGGGTATAAGCAGACAGCACCCAGACAGATTTACCAGGGCTGGAGG  
GTTGTCAAGAGAGGGTAAGGGAATTGAGTGTGTGCAACAGTATCATTCCAGTGATTTAA

313982 AGTATCATTCAGTGATTTAAATTCCATGGAATTCCATGGTAAGGAGGAAGCAACATCAC  
CACAGGTGACAGGCATACAGTTGGTCAGTAGATTCCCGGTGGGGCTGAAGAATTCTTGGA  
GTCTGGATACCAGACAGAATAAACAGAGAGATGGGAGGTGATCAGAGAGTAGGATGCC  
TGTAATATGAGTTTTAGGCTGTATAATTTGTAATGACAGTGTCTGGACTCCAGGATA  
TGGCCACCTGTAAGGTGGAGAGTTGGCAGGTAATCAACTTGATGTTTTAAATCACCTGGC  
[A, G]  
CTTACACAGGTGGCATATAAGGGAGACTGCTGTTAGCCATAGGCTACAACACAGGAAATG  
GGGTGGGGCATAACCCAGAGTCAGCAGGTGACTGCAGCAAGAGGGGCGGTGGGTGGCAC  
GTGGAGCATGCACGGGGGTTTCCCTTTCTCCCTGAGAGCAGGTTCTCTGAGGCAGGGTCT

CTTTTTATGCCCATTTTACAGAAGAGGAACGGAGGCATCAAAAAGTTGCACGTGGTGGTA  
GAGATGAAACTCAAATCAGGGGATGTCCTCCAAAATTAACACCCTGGACACCACACAGAG

314043 ACAGGTGACAGGCATACAGTTGGTCAGTAGATTCCCGGTGGGGCTGAAGAATTCTTGGAG  
TCTGGATACCAGACAGAATAAACCAGAAGAGATGGGAGGTGATCAGAGAGTAGGATGCCT  
GTAGATATGAGTTTTTCAGGCTGCTATAATTTGTAATGACAGTGTCTGGACTCCAGGATAT  
GGCCACCTGTAAGGTGGAGAGTTGGCAGGTAATCAACTTGGATGTTTAAATCACCTGGCA  
CTTACACAGGTGGCATATAAGGGAGACTGCTGTTAGCCATAGGCTACAACACAGGAAATG  
[G, A]  
GGTGGGGCATAACCCAGAGTCAGCAGGTGACTGCAGCAAAGAGGGGCGGTGGGTGGCAGG  
TGGAGCATGCACGGGGGTTTCCCTTTCTCCCTGAGAGCAGGTTCTCTGAGGCAGGGTCTC  
TTTTTATGCCCATTTTACAGAAGAGGAACGGAGGCATCAAAAAGTTGCACGTGGTGGTAG  
AGATGAAACTCAAATCAGGGGATGTCCTCCAAAATTAACACCCTGGACACCACACAGAGT  
ACCTTCCAACACAGACAGGTTGACCATGAGTAAGATTTGGTCCCTGGCCCCAGGGAGTCC

314103 TCTGGATACCAGACAGAATAAACCAGAAGAGATGGGAGGTGATCAGAGAGTAGGATGCCT  
GTAGATATGAGTTTTTCAGGCTGCTATAATTTGTAATGACAGTGTCTGGACTCCAGGATAT  
GGCCACCTGTAAGGTGGAGAGTTGGCAGGTAATCAACTTGGATGTTTAAATCACCTGGCA  
CTTACACAGGTGGCATATAAGGGAGACTGCTGTTAGCCATAGGCTACAACACAGGAAATG  
GGGTGGGGCATAACCCAGAGTCAGCAGGTGACTGCAGCAAAGAGGGGCGGTGGGTGGCAC  
[G, A]  
TGGAGCATGCACGGGGGTTTCCCTTTCTCCCTGAGAGCAGGTTCTCTGAGGCAGGGTCTC  
TTTTTATGCCCATTTTACAGAAGAGGAACGGAGGCATCAAAAAGTTGCACGTGGTGGTAG  
AGATGAAACTCAAATCAGGGGATGTCCTCCAAAATTAACACCCTGGACACCACACAGAGT  
ACCTTCCAACACAGACAGGTTGACCATGAGTAAGATTTGGTCCCTGGCCCCAGGGAGTCC  
ACTCTTCTATGGGAAAACAAGACGTGTGCAAAAACAAGGCAAAGGCTGTGGGACGGTTG

314832 GTCAGAGGCAACAGCCTAAGCGTAAGAACAGATGGGAAGGCTCCAGACCATCTAATATGG  
CCAACCTCGTCCCGTGCCATGGACAAATAAAAGAGAAGAAATGATGCAGGAGGGAGGGATT  
AGAACGATAACAGCAAGGGCGTGTGTTAGGGAGCTAAATGCAATCACACACAACCCCCAA  
ATCTCAGGGGCTTAGTGCAATATTTATTAGTGCAAAGATTTGTTCTCCATTCTCTGTAACA  
GCTCAAGGCTGGTGTTCAGTTTCTGTGCACACAGTGACATGGGGACTCGGACACCTTCAG  
[G, T]  
ATGTGGTTCTTCCGTCTCCTGGGGCCTCAGATTCCCTTTACTGGATGCTGCATCTGGCCGG  
TATACAGTAGGATGGAGAGAGTAGAGAGGCTTGCAGGAGCTGTTTTGGAGCCCAGCAAAG  
CCCTTGCACCCATCCCTCCTGACACATTCCACTGGCCAGAACTCAGTCATATGGATGCCT  
CAACTACAGGAAGAGCTGGGAAATGTAGTCCAGCTGTGTCCACAGGAGGGAATGGATGCA  
GGTTGAGGTGAACACAGAGCATTCTCTGCCAAAGACATGCAGGCCACAGAGTTTGGGCAT

315368 ATGCAGGTTGAGGTGAACACAGAGCATTCTCTGCCAAAGACATGCAGGCCACAGAGTTTG  
GGCATGTCAAGGAAGCCAGGGAAGCATGGAGGGTGTGGTCAAAGTCAGTTTGAGGAGGAC  
CGACCTGTAGACACCCACAGGGAAGAGTGAGGACTAGGAACTCCAGAGACTGTAGAAGA  
CCTGAACACAGATGCAAAGTGGGAACAGAAAAGGGCACAAAAAGAAAGATGATTCTGGG  
AGGCTCTTGTGGCCCTTGCGTGGGGTGGCGGTGGGAGAGAAGGAGCTGAACAGTGAAGA  
[C, G]  
CATTCGAGAGTTGCGCCACAGGGCCAAGATGGCCGCTGCCTCTCCTTCTTAGCTCTGGG  
GGTGGCCGAAGGCAGGGTCAGGCCCTGTGGAGATGGAGTGGCGGGAGGTGGCTGTGACGG  
TCCTCCGCACTCCATAGCCTGGCCCCACAGAGGGGAGAAGAAAGGATCTCTTTAATTTT  
CTTCTCAGGCCTCCACCTGACGAAGGAGAAATATCACCCAACATTGTTATCTCTCAGAAA  
ATACTCTCTGGAATCATAAAAAGGGAAATACAGTGAAGCTAGACCACGAAGGCTGCCCCT

315431 ATGTCAAGGAAGCCAGGGAAGCATGGAGGGTGTGGTCAAAGTCAGTTTGAGGAGGACCGA  
CCTGTAGACACCCACAGGGAAGAGTGAGGACTAGGAACTCCAGAGACTGTAGAAGACCT  
GAACACAGATGCAAAGTGGGAACAGAAAAGGGCACAAAAAGAAAGATGATTCTGGGAGG  
CTCTTGTGGCCCTTGCGTGGGGTGGCGGTGGGAGAGAAGGAGCTGAACAGTGAAGACCA  
TTCCGAGAGTTGCGCCACAGGGCCAAGATGGCCGCTGCCTCTCCTTCTTAGCTCTGGGG  
[T, C]  
GCCGGAAGGCAGGGTCAGGCCCTGTGGAGATGGAGTGGCGGGAGGTGGCTGTGACGGTCC  
TCCGCAGTCCATAGCCTGGCCCCACAGAGGGGAGAAGAAAGGATCTCTTTAATTTTCTT  
CTCAGGCCTCCACCTGACGAAGGAGAAATATCACCCAACATTGTTATCTCTCAGAAAATA  
CTCTCTGGAATCATAAAAAGGGAAATACAGTGAAGCTAGACCACGAAGGCTGCCCCTTAA  
ATCAGGAGCTTCTAAATTATCACAGTGGCGCTCTCTAATTCCTCGGAATGAAAACATTAA



315993 ACAGTGGCGCTCTCTAATTCCTCGGAATGAAAACATTAAAGATGACAATGTCCCTTTAAA  
TCAAAATGCCCTGGGAGTTGCTGTAAAGAGTCAGTGGGCTTTTTTTTTTCCCTTGTGAGGA  
TTTTTTTTTTTTTGTCTCTTTTACCTTATAATAAAATATAAATCATAACTTGTGGGGGCAG  
GCTCTACAGAGCAAGCTGTGAACATGGATTTTCTGAAAATGAAGGTTTTTTTTTAATGGGA  
ATCATCTCATCTCAGGAAGCATGAGAGTCTCAAATGATGAGTTTGTACTTCACACTTTC  
[T, -]  
TTTTTTTTTTTTTGTATTACAGGTGGGCCTCAGGCCTAGCTGTGGCACCCTGTGATGAA  
TCATGATGGCACACCCAGGAGGCCAGTGGGCTGACTCAACCCCTCCTGGAGCGGCCACT  
GTGCTCAAGCTGTGCGAGGTAGGGGCAGGGAGGCACAGCCTTGGGAGGTAGCATGTAGAG  
GCAGGAGGACTGGGGCCTGGAGGAAAGGGCATGGTTTACACCCCTTGGCCCCCTTCCAGGC  
AGGCCTGGTGGTCTGAGCTCTTGTGCCACAAAGAGAACCCAGAGGCTAGTGCAGCCCCAG

316107 TGAGGATTTTTTTTTTTTGTCTCTTTTACCTTATAATAAAATATAAATCATAACTTGTGG  
GGGCAGGCTCTACAGAGCAAGCTGTGAACATGGATTTTCTGAAAATGAAGGTTTTTTTA  
ATGGGAATCATCTCATCTCAGGAAGCATGAGAGTCTCAAATGATGAGTTTGTACTTCAC  
ACTTCTTTTTTTTTTTTTTGTATTACAGGTGGGCCTCAGGCCTAGCTGTGGCACCCTG  
TGATGAATCATGATGGCACACCCAGGAGGCCAGTGGGCTGACTCAACCCCTCCTGGAGC  
[A, G]  
GCCACTGTGCTCAAGCTGTGCGAGGTAGGGGCAGGGAGGCACAGCCTTGGGAGGTAGCAT  
GTAGAGGCAGGAGGACTGGGGCCTGGAGGAAAGGGCATGGTTTACACCCCTTGGCCCCCTT  
CCAGGCAGGCCTGGTGGTCTGAGCTCTTGTGCCACAAAGAGAACCCAGAGGCTAGTGCAG  
CCCCAGGAGGAAGGGTTGGGAGCCACGGGTGAGAGAAGGCTGCATGGCAAGGTGGACTTG  
TTTTCTGCATTCTGGTGTGAAAAGGGGTGAGAGATGGAGAAAGAACTGGCGAGTTGACC

316352 AATCATGATGGCACACCCAGGAGGCCAGTGGGCTGACTCAACCCCTCCTGGAGCGGCCA  
CTGTGCTCAAGCTGTGCGAGGTAGGGGCAGGGAGGCACAGCCTTGGGAGGTAGCATGTAG  
AGGCAGGAGGACTGGGGCCTGGAGGAAAGGGCATGGTTTACACCCCTTGGCCCCCTTCCAG  
GCAGGCCTGGTGGTCTGAGCTCTTGTGCCACAAAGAGAACCCAGAGGCTAGTGCAGCCCC  
AGGAGGAAGGGTTGGGAGCCACGGGTGAGAGAAGGCTGCATGGCAAGGTGGACTTGTTTT  
[C, G]  
TGCATTCTGGTGTGAAAAGGGGTGAGAGATGGAGAAAGAACTGGCGAGTTGACCCAGGC  
TGGGAGATCAATAGCGGGCAGTGGGGTGTGACCTATTTTTCAGCTTGCCCTCTCCCTCT  
CTCTGCGATCCTCCATCTGCCAGTGCCCATCTCCATGGGCTGGGTGGAGACTCAAGGCCT  
GGCAGGGCCAAGTCTGGGAAGCTGCTGGACAGTTGTAACCAAGGTAGGAAAGCAGTCTCT  
GATATTTTAGAAAAGTGTCAAGGCTTAGGTCTGAAATCGCAGGGCTTGCTGATTAAAC

319520 ATATTTGGACAGATAGAGAAGGAAAGGGCTCTACTTCAAGGCAAGAGAAAGGCTCAGAAG  
AAGGATTAGGAGTGGGGATTCAAGAATATAATTCCTTCAGTATTAAGTACCTGCTAAAGG  
TGGGCAGATCAATAGCGGGCAGTTGGGGTTGTGACCTATTTTTCAGCTTGCCCTGCTT  
TGCCCTGAGGCTCCAGACCTCGCAGCCCCCAAGGTTCCCACTGTTATCCCAAGTCCCAAG  
GGCAGCTGGGATCTGACCTTGCTCCTGAGAAATGCTGCATGAAAGAGGGGCATACACTCT  
[G, A]  
TGGAGCTCCCTTGCCCAAGGGCCTCCTCCAGGCCAGGCTGTGCCTCTGAGCCCAGGCTGC  
AGAGACGGGAGGATGGCACAGCACCACCTCTAGGGTATGGAGAGCAGCCTCTGACAGACC  
CTCACCTCAGTCTTTGTAGAAAGAGAGCAGACAGTTTCTGTAACCGAGGAATAATTCT  
CAAGGTGGACATGCGACCCAGAAAATGGAGTGATGCTTAGTCCCCAGATGCCCTCCCA  
GCGCTGTCCAGCTGTCTGACAGGGGCTGCCACTCGGATAGGTGAGTCAAGCGAGGCCAG

319699 TTGCCCTGAGGCTCCAGACCTCGCAGCCCCCAAGGTTCCCACTGTTATCCCAAGTCCCAA  
GGGCAGCTGGGATCTGACCTTGCTCCTGAGAAATGCTGCATGAAAGAGGGGCATACACTC  
TGTGGAGCTCCCTTGCCCAAGGGCCTCCTCCAGGCCAGGCTGTGCCTCTGAGCCCAGGCT  
GCAGAGACGGGAGGATGGCACAGCACCACCTCTAGGGTATGGAGAGCAGCCTCTGACAGA  
CCCTCACCTCAGTCTTTGTAGAAAGAGAGCAGACAGTTTCTGTAACCGAGGAATAATT  
[A, C]  
TCAAGGTGGACATGCGACCCAGAAAATGGAGTGATGCTTAGTCCCCAGATGCCCTTCC  
AGCGCTGTCCAGCTGTCTGACAGGGGCTGCCACTCGGATAGGTGAGTCAAGCGAGGCCA  
GAGCCCTTTTACAGGCACCTTGGGGCCTTGGGTCTACCTTCACTTTCCAGGACACAAAG  
GCTCTCCCTAGGCAGGCTCTGTCCAGCATCCAGGGCCAAGGGGCTCAGGCAGAGGCTCT  
TTAAAAGCTTGGTGTTCATCTTGATGAGTTTCTTGTGGGGCTCTGAGCATTGTGACT

320863 ATTAATCCAGGCAAGTCCAAGTCCAAACAAACAGCCTTTCTCTGCTTTCCTGAGGCAG  
GAGATTGGGGATAAGGCATGAGGGAGAGATGCAGAGTCTTGTGATGTGGCAGTCATGGA  
AGGCAGGCTCCCTGGAGGAGGTGGTGTGGCATTGGAATGGCATCCAGAAGGATGTGTG

TGATTGGAGTAAAGGGCAGGAAGAACAGTGGGAGCAAAGAAAGACACTGAGGCTGGAGGA  
 CACAGAATACATTCAAGAAACGGCACTGTTGTCATCCTAGAGCAGAGTGCGGGCAGCAGG  
 [G, A]  
 GGCAGTGGGGACCACAGTGTCAAGTCACTAGAGGCTGGAATGAGAGGCCAA  
 GAACAGCCATCCAAAGCTCTGGGCAGGGGAGAAGCAGATCCAGGGCTGAGCTGGTTGGGA  
 TGCCTATGCCTGCATCTTAGGAAATGAAATGACCCAACTGCGGCCTCCATCATAGGCCAG  
 CACCCAGGTAGCATCCCGAGCCACTGCTGATTTAAGAGATGTGCATGCAGCTGTCATTCA  
 CAGACTCCCAGCAATAGTGTTCACCTCCTCGGTAGAAATAGTCACCTACAAAGCATTTTTT  
 321530 CACTGCAAGCCCCACCTCCTGGGTTTCATGCCATTCTCCTGCCTCAGCCTCCCGAGTAGCT  
 GGGACTACAGGCGCCCGCCACACCTGGCTAATTTTTGTATTTTTAGTAGAGACGGA  
 GTTTTACCATTGTTAGCCAGGATGGTCTCGATCTCCTGACCTTGTGATCCACCCGCTCAG  
 CCTCCCAAAGTGTCTGGAATTACAGGCGTGAGCCACCGCTCCGGCCAACCTACAAAGCTT  
 TAACACACTGAAAGCAGAGGATTTCTGCCTGAAAAGCACTGGTATTTGGACTTGTGAACA  
 [T, C]  
 AAAGATGGGAATGCAACCAGGCAATGCAGGGGCTGCCTAGAGTCAAGGGTTTGTTTTTAA  
 GTAAGAGAGACAGAATGATATTTACAATCAGTACTTCTCAAATTAGGTTTTCTTTTTATG  
 GGATTGAAAATTTCTCATTCAAGCCCCATGGAGAGATGTGGTCTGAGGGCAGCATTGAGG  
 CGATCAGTGTGTCTTAAACTTCCAGACGCTCACAGACACTTAAAGTAAAAACAGAGAGA  
 AACAAAATTGTTTCCAAAAGCAGCAAAGAAGGCTGATCTGCTTGTAGGATCCTTGCGAG  
 323257 GCAGGACATGCCCTTGGCCTTGGAGGAAACAGGGAAATCATTCTTTGGAAGTGTAAAGA  
 GGAAATGTGAGAATTGAGATCCTACTCCATGGCAGTTCTGAGGGTAATATTTAGGGCC  
 AAGGGAATGGGGCACCTTTCTGCCCCAGTCAGAGAGAACCTTTGGTACCAGAGGCAGCC  
 TTCAGGGAAAGGCTAGGGTCCCAGCCAGCTGGCACCTGACTGAACCTCACTTGAGCTGTA  
 TGTGTTCCCTCATTCTGCCAGGACACTGGTCAAAGCTGAAATATTATTACTATTACAAG  
 [A, G]  
 TTTTAGCAGTGCCACCTCCATCAAGATTTCCATTTGTCTTCTCGCTTCTTCTCATTGT  
 TTACAAATATTTCTTGACTTCTCTCTCTTCTTTCAAACAGTGCCCTGCCCATTTATAATC  
 AGAAGACAAATAAACTTTGTGCAAATCTCCCTGTTCCCTCATGAACTAGCCAGGCATAGA  
 AGGGGCAACACCAAGGGTGTGCCTATTGACTCAATGCCATGTTTTGACCACTCTCAGGGC  
 CGCCCACTGGGGCTTCCATAGCATCACCTATCATCTTGTGCCCACTTACTCCAGAGCCTT  
 323754 GTGTGCCTATTGACTCAATGCCATGTTTTGACCACTCTCAGGGCCGCCCAGTGGGGCTTC  
 CATAGCATCACCTATCATCTTGTGCCCACTTACTCCAGAGCCTTCGCTGGCTCCCTATTT  
 CCCACCTCACCAAGTCTGAGCACCTCTGCCTGCTCGTTAGGTCTCGTGCCCTAGCCAGTC  
 CTTTCACAGCACCTGACACCCTACTCAGCCTGTCTCTTCCCGTGGGTCTGTTTACTCCC  
 CTACCCTACCCAGGACTTCTTCCAAGCAAAAAGCTAATATGTTAAGGAAGGCAAGGACC  
 [A, G]  
 TGTCAGATATCCTCCAGCATCTGACACCGAGCATCCTCTCCAACCTGAGACAGTTTATAA  
 TCATTTCAAAGTAGAGAATGCCAAGAAGACTGGCCTGTGGGGGTTTCATCAAATCTTGGA  
 TGCCTGAATCTTCTCCAGGAGGGTTGCCAAGGACTTAAGAAAAAGAGCGAGTGTCCAG  
 GCAGAGTCCAAGGAGTGGTTCCAGAGCAGCACATGCCAGGGGCTGTGTCTGCACAGGTTG  
 AGTGGGAAGAGGAAGAGGATAATGGCAAGGATGTAGAGGGAGGAGACTGCCCGGCAGGC  
 324544 TTGATTAGCAGCAGTCTGACCTGGGAGCATGGACTTGTGAGAATTGCTCCTTATGATGTG  
 CTTGGAGTTCCAAATTTGCAGATGGTCTCTCTGAGGTTGGGGCTGGATCAGCGTGAGAGA  
 AGGGACAGTGTGGGAGCCCCCTCCACATCTGTGGAGATAACATCTTGCCCTTCTACAT  
 GTGTCTCCTGGTCTTTGCCTGATATGGTTTGGTTCCATGTCCCCACCCAAATCTCATGTT  
 GAATTGTAATTTCAATGCTGGGGGAGGGACCTGATGGGAGGTGATTGGATCATGGGATC  
 [A, G]  
 AATTTCCCCCTTGCCACTCTCATGATAGTGAGTTTCCACAAGATCTGATGTTTTCAAAGT  
 GTGTAGCACTTCCGCCTTTGCTCTTTCTCTCTGCTCTGCCATATTAAGACATGCTTGCT  
 TCCCTCTGCCTTTGCCATGATTGTAAGTTTCTGAGGCCTCCAGCCATGCTTCTCTGT  
 ACAGCCTGAGGAATGTGAATCAATAAATCTCTGTCTTTCATCAATAACCCAGTCTCAG  
 GTAGTTTTTTATAGCAGTGTGAGAACAGACCAATATATGCCCCTACACCCATGCAGTGCT  
 324599 ATGTGCTTGGAGTTCCAAATTTGCAGATGGTCTCTCTGAGGTTGGGGCTGGATCAGCGTG  
 AGAGAAGGGACAGTGTGGGAGCCCCCTCCACATCTGTGGAGATAACATCTTGCCCTTC  
 TACATGTGTCTCCTGGTCTTTGCCTGATATGGTTTGGTTCCATGTCCCCACCCAAATCTC  
 ATGTTGAATTTGTAATTTCTCAATGCTGGGGGAGGGACCTGATGGGAGGTGATTGGATCATG  
 GGATCAAATTTCCCCCTTGCCACTCTCATGATAGTGAGTTTCCACAAGATCTGATGTTTT  
 [A, C]

AAAGTGTGTAGCACTTCCGCCCTTTGCTCTTTCTCTCTGCTCTGCCATATTAAGACATGC  
TTGCTTCCCCTCTGCCTTCTGCCATGATTGTAAGTTTCTGAGGCCCTCCCAGCCATGCTT  
CCTGTACAGCCTGAGGAAGTGTGAATCAACTAAATCTCTGTTCTTCATCAATAACCCAGT  
CTCAGGTAGTTTTTTATAGCAGTGTGAGAACAGACCAATATATTGCCCTACACCCATGCA  
GTGCTGTGAGCCAACAGCCCACGTCCAATTCTCATAATGGTTTCTATGAGCCACTGCC

324921 TTTGCTCTTTCTCTCTGCTCTGCCATATTAAGACATGCTTGCTTCCCCTCTGCCTTCTG  
CCATGATTGTAAGTTTCTGAGGCCCTCCCAGCCATGCTTCTGTACAGCCTGAGGAAGT  
TGAATCAACTAAATCTCTGTTCTTCATCAATAACCCAGTCTCAGGTAGTTTTTTATAGCA  
GTGTGAGAACAGACCAATATATTGCCCTACACCCATGCAGTGTGTGAGCCAACAGCCCA  
CTGTCCAATTCTCATAATGGTTTCTATGAGCCACTGCCCTGGCAAATGCACCTTATGG  
[C, T]  
CAAACATCTCCAGGGCCTGCTCTCAATTCTACCCCAAGCAGCACTAGAATTTCTTACCC  
CTGGGGATCTGCTGCCCCAGGTCTGTATAGGAAGGAATGCCACCATGTGTCTGGCATTAT  
TTGGGATGAACAAGAAGGTGAGAGAGAGAAGTGAAAGCAGACTGTCCCCCTGGATCTGG  
ACCATGTAATAGACTCCTCACCAGCTGTGTCTTGTATTGCTTTCTTTGTCACTTGCCA  
ATGGACACATCTTTCCAAGACAGGGCCCAGGTCACTGTCCACCATTTGGACAAGGGCCAG

327295 GGACTGCAGCAGCTTTTAGGGAGCTCAGCTTGGAATCCTGCAGAGCTGGGCAGATTTAC  
CTCTCTGAGTCTCAGTTTTCTCATCTGTACAATGGAAGTAATTGTACAGAAACATTGTTT  
TGAGGGTTCAAGGAGAAAATGTGTGTAAAGGGCTTAGCAGAGTGGCAGGCAGGGTGCTCA  
GGGAATGTCAGATTTTATTACTGTTATTATCTGCCTCCTAAGTCCCACCTATTTAGAGA  
TATTTTCTTAGGAAAAGGGTTTCAGGCAACAGTCAGCAGGGACCTTCTGAGGTCTCTGGA  
[C, G]  
TCAAGACCTTGAAGTGTCCCTCAAGGCCATTAATGCAGATCACAATACCAGGCCAGGA  
TTTGAGCTAAAGGAGAGAACCAGCTGGCTCAGGGCTCCAAGGAGGTTGGGCTGGTGGAAG  
GGGCAGGACAAAAGCAACTCCAGGGGGTGTCCAGACACAGGGACCGGTGTGCAGGCTCA  
CTGCTCACCCACCAACTGTTTACCCAGCACGTTCCATGTGTGGGGCACTGGGCAGGCTGC  
TGGCATTTAATGGTAAGCAAAGCCAGATGTGGTTCTGCCCTTGAGAACTTACAGTTCT

330836 ACCCTCCTGCTATTGTGGTGAGGGCCGCATGTTCCAGGCCACGGGACTGAGCTCAGAAGA  
GCACACGGCTCTGGTCACAAGAATGGGCAGAGGGTGATGAAATCCCTTGTGCGGTGGCGT  
CTTTGTATAGGCCCCCCACCTACTCCGGACTGGCTGTTCTTTATCTTTTGCTTCACATC  
AGCACCAAGTGTCCCTGGCATGAACCCCCAAAAACAGTTCAGAAGAGGGCTTCCTCCTAC  
ATCATGCCGGTGGGGGAAGAAAGCCCAGGGCCCCAGGATCCCCAGAGTCAGCCCCACTC  
[G, A]  
TGAGGCTGCTTTATCCAGAGCATCAGGGGCCACCCCAAGGGGCAAGTCAGGTCTAGGAGG  
GCCCCAGCCTTCTGTCAGGCTCCTCCCAGGACTTGCCAGGGGCAGAGAGAAGGAAGCTG  
ATGGGGAATAGCAATACATTCTTTCTCTGTAAAGATTCTATTGCTGTTTAGCCCTATG  
TTTTCTATGATAATATTTTCAGTTATTTTTTAGATAGTAAGTGAGTGCAGCATACATAGA  
AAAGTGCACAGCTCAATGAAGCAGACAAGAGCATGCTGTGCAACCACTGTCCCCATAAGA

331239 GCAGAGAGAAGGAAGCTGATGGGGAATAGCAATACATTCTTCTCTGTAAAGATTCTAT  
TTGCTGTTTAGCCCTATGTTTTCTATGATAATATTTTCAGTTATTTTTTAGATAGTAAGTG  
GAGTGCAGCATACATAGAAAAGTGCACAGCTCAATGAAGCAGACAAGAGCATGCTGTGCA  
ACCACTGTCCCCATAAGAAATACAGTGCCGCCAGCACCTCAGACGCCCTCCTTCTGCTT  
GCACCCAATCCCCATACCCGTCTCTACCTGACACAATTATCATCCCACTTTTCTTTTC  
[T, -]  
TTTTTTTTTTTGTAGACCGAGTCTTGCTCTGTTGCCAGTCTGGAGTGCAATGGCACAATC  
TCGGCTCACTGCAGCCTCTGCCTCTCAGGTTCAAGCAATTCTGCCTAAGCCTCCCAAGTA  
GCTGGGATTACAGGGGCACACCGCCACACCCAGCTAATTTATTTTTTCATTTTATAGTA  
GACAGGGTTTACCATGTTGGCCAGGCTGATTTCAAACCTCCCGACCTCAGGTGATCCACC  
CGCCTTGCCCTCCCAAAGTGCTGGAATTACAGGAGTGAGCCACCGCGCCAGCCTATTAC

331612 AGCCTCTGCCTCTCAGGTTCAAGCAATTCTGCCTAAGCCTCCCAAGTAGCTGGGATTACA  
GGGGCACACCGCCACACCCAGCTAATTTATTTTTTCATTTTATAGTAGAGACAGGGTTTCA  
CCATGTTGGCCAGGCTGATTTCAAACCTCCCGACCTCAGGTGATCCACCCGCTTGGCCTC  
CCAAAGTGCTGGAATTACAGGAGTGAGCCACCGCGCCAGCCTATTACCCTGTCTTTCTA  
ATATCAGAGTAATTTTGCCCTATGTTTGAACCTTGTATCAACGGACTCATACAGAATGA  
[T, C]  
CTCTGTGTGCTGCTGCTGCTTCAAACATATGTCTGTGAGATTTGCCCTATTGTCACTTC  
ATTTATAGCAGGAGTTTGTCTTTTTCATTTGATGATAATATTCTGTTGTAAGAATATGCC  
ACCTGGGTTGATGTACCAGCTTGTTTCCAGTTTGGGAAAATTATAAATAATGGTCCTATG

AATGTTCTTGTGCAAGCCTTTGGTATGCATCTCTGTCAGAAATCTATCTCTTCGCATCAA  
ATTGCTGGTGGAGAATATGCACAGAGTAACAAGATATTGATGCCTGGTTTTAAACATGCT

331823 CGCGCCAGCCTATTACCCTGTCTTTCTAATATCACAGAGTAATTTGCCTATGTTTGAA  
CTTGTATCAACGGACTCATACAGAATGATCTCTGTGTGCCTGGCTGCTTGCTTCAAAC  
ATGTCTGTGAGATTTGCCTATTGTCACTTCATTTATAGCAGGAGTTTGTTCCTTTTCATT  
GATGATAATATTCTGTTGTAAGAATATGCCACCTGGGTTGATGTACCAGCTTGTTCAG  
TTTGGGAAAATTATAAATAATGGTCCTATGAATGTTCTTGTGCAAGCCTTTGGTATGCAT  
[C, T]  
TCTGTCAGAAATCTATCTCTTCGCATCAAATTGCTGGTGGAGAATATGCACAGAGTAACA  
AGATATTGATGCCTGGTTTTAAACATGCTCCTGTTATAAGAGTAGACACTTAACCATGGT  
GGGGAGTGGGGAGGGATGGCCTTTGGCCCCAAGGTACCCATTCAGGGCCAGCTTGGGACA  
CAGTCTTGAGGGGTCAATTATTATTTCCCCCACCATGGCCTTGAGACCCTGGGTGTTTCCTA  
CAGGGCCCTCCCTGCCTTTGGGTGAGGGACACTTTTCAAGAATTTGCCATAAGGCTAAGG

334749 CAACTCCATCAGCCCCAGCCACCGCCCTGGCCATGTTGAGAGTTTGCCAAAGAAAAATGA  
ACACTTGGGCCCTCAAAGTGCAGGCATTAATATCCTAAGTGTCTCATGGAAGACTTTG  
TTCCCCAAGGAGAGTAAATCTTTCCTTGTGGGATGCAGCAGGCTAAGGACCAAGCTGACT  
CTCTGAGCTCAGTAATCAGGCTAGTCTCCTGCTGGAGGCACAGAAGGGAACCTCCGCTGTG  
TGTCAGCACCTCCTGCATGCCCTGACTCATGCTTGGGGGAAGGACGGTGGAGTGAGAGGC  
[A, G]  
GATATGGACCTCCCTGGGCAGAGCTCCCTGTTATCCCTGGAGTGGGTTACTCCTTCCGC  
TGCCTGCAAACGTAGGTTTCCCTTCAGCTACGCAAAGGCCTGTGAACACAGATACGTGGT  
CACAAGCATCTTTGCAGCTGTTTCTTTCCACCAGCCTGGGGCCTGCTGGGTTTCCTGAAAC  
CTCAGGGTAAGTCAAGCCTCAGAGGTCATCAGTAGCCAGTATCCACTGTTCTGCACCCCT  
TGGGAGAAGCTCGAAGAACAGGGCTGCCAACTTCTTCAGTAAGATCCCCCAGGTAACCCT